CDX-R88/R66

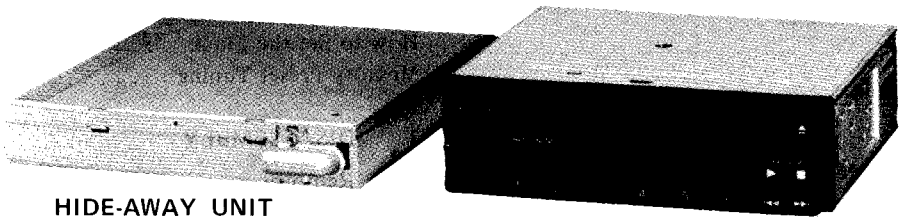
SERVICE MANUAL

US Model
Canadian Model
AEP Model
E Model

CDX-R88:

US Model

CDX-R66:



HIDE-AWAY UNIT

SPECIFICATIONS

AUDIO POWER SPECIFICATIONS

POWER OUTPUT AND TOTAL HARMONIC DISTORTION
11 watts per channel minimum continuous average power into 4 ohms, both channels driven from 30 – 20,000 Hz with no more than 1% total harmonic distortion.

OTHER SPECIFICATIONS

Power amplifier section (inside of the hide-away unit)

Outputs: 2 Line outputs
Inputs: Auxiliary inputs
Maximum power output: 25 watts per channel at 4 ohms
Tone controls: Bass ±8 dB (100 kHz)
Treble ±8 dB (10 kHz)

CD player section

System: Compact disc digital audio system
Laser Diode Properties
Material: GaAlAs
Wavelength: 780 nm
Emission Duration: Continuous
Laser output power: Less than 44.6 μW*

* This output is the value measured at a distance of about 200 mm from the objective lens surface on the Optical Pick-up Block.

Frequency response: 5 – 20,000 Hz ± 3 dB
Harmonic distortion: 0.008% (1 kHz)
Dynamic range: 90 dB
Signal to noise ratio: 85 dB
Wow and flutter: Below measurable limit

General

Power requirements: 12 V DC car battery (negative ground)
Current drain: 800 mA (CD playback)
2 A (during disc loading or eject)
Operating temperature: – 10°C – 50°C (15°F – 120°F)
Dimensions: CD player:
Approx. 178 × 50 × 144 mm (w/h/d) (7 1/8 × 2 × 5 3/4 in.)
Hide-away unit:
Approx. 178 × 30 × 180 mm (w/h/d)
(7 1/8 × 1 13/16 × 7 1/8 in.)
including projecting parts and controls
Weight: Approx. 2.5 kg (5 lb 8 oz) incl. hide-away unit

– Continued on page 2 –

FM/AM COMPACT DISC PLAYER

SONY®

MICROFILM

AUD

Tuner section (inside of the hide-away unit)

		FM tuner section	AM tuner section
Tuning range		87.9 – 107.9 MHz (US, Canadian models) 87.5 – 108 MHz (AEP, E models)	531 - 1,620 kHz (at 9 kHz) 530 - 1,620 kHz (at 10 kHz; adjustable with the model only for E model)
Antenna terminal		FM/AM external antenna connector	
Intermediate frequency		10.7 MHz	450 KHz
Sensitivity	Usable sensitivity	11.2 dBf (1.0 μV/75 ohms)	28 μV
	at 50 dB quieting	16.4 dBf (1.8 μV/75 ohms)	
Selectivity		75 dB at ±400 kHz	—
Signal-to-noise ratio		70 dB (monaural) 67 dB (stereo)	55 dB
Harmonic distortion at 1 kHz		0.2% (monaural) 0.3% (stereo)	0.3%
Stereo separation		40 dB	—
Frequency response		20 Hz - 15,000 Hz ±3 dB	

FEATURES

- A DIN sized mobile CD player and a hide-away unit in which FM/AM tuner, power amplifier ano power supply section are combined.
- Fader-control to adjust the volume of the front and rear speaker for 4-speaker system.
- Auxiliary inputs to connect an optional cassette car stereo.
- Quick recovery from sound skipping. Even if strong vibration may cause sound skipping, the player can relocate the point where the play was interrupted.
- Maximum power output of 25 watts per channel.

CAUTION

Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.

SAFETY-RELATED COMPONENT WARNING!!

COMPONENTS IDENTIFIED BY SHADING AND MARK ⚠ ON THE SCHEMATIC DIAGRAMS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.

ATTENTION AU COMPOSANT AYANT RAPPORT À LA SÉCURITÉ!

LES COMPOSANTS IDENTIFIÉS PAR UNE TRAME ET UNE MARQUE ⚠ SUR LES DIAGRAMMES SCHÉMATIQUES ET LA LISTE DES PIÈCES SONT CRITIQUES POUR LA SÉCURITÉ DE FONCTIONNEMENT. NE REMPLACER CES COMPOSANTS QUE PAR DES PIÈCES SONY DONT LES NUMÉROS SONT DONNÉS DANS CE MANUEL OU DANS LES SUPPLÉMENTS PUBLIÉS PAR SONY.

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SERVICING NOTES

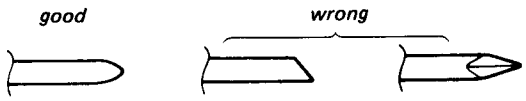
NOTES ON HANDLING THE OPTICAL PICK-UP BLOCK OR BASE UNIT

The laser diode in the optical pick-up block may suffer electrostatic breakdown because of the potential difference generated by the charged electrostatic load, etc. on clothing and the human body.
During repair, pay attention to electrostatic breakdown and also use the procedure in the printed matter which is included in the repair parts.
The flexible board is easily damaged and should be handled with care.

Flexible Circuit Board Repairing

1. Keep the temperature of the soldering iron at 270° ± 10°C during repairing.
   You can maintain the temperature of the soldering iron around 270°C by using the thermal controller as illustrated on the right.
2. Do not touch the soldering iron more than 4 seconds or 3 times on the same conductor of the circuit board.
3. Do not apply force on the conductor when soldering or unsoldering.

Tip of soldering iron



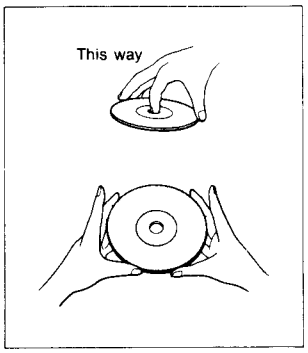
PRECAUTIONS

- Before operating the unit for the first time or after replacing the battery, press the reset button with a pencil, etc., then start operating the unit.
- If your car was parked in direct sunlight and there was a considerable rise in temperature inside the car, allow the unit to cool off before operating.
- If no power is being supplied to the unit, check the connections first. If everything is in order, check the fuse.
- If no sound comes from the speakers of a 2-speaker system, set the FADER control to the center position.
- When transporting the unit, keep the unit horizontal.

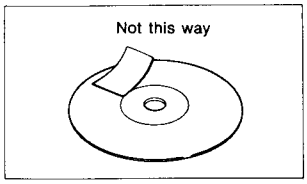
Notes on moisture condensation
On a rainy day or in a very damp area, moisture may condense on the lenses inside the unit.
Should this occur, the unit will not operate. In this case, remove the disc and wait for about an hour until the moisture evaporates.

NOTES ON COMPACT DISCS

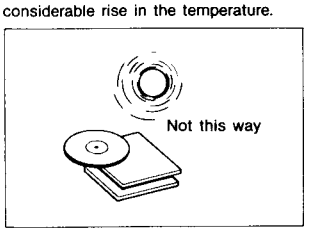
Handle the disc by its edge, and to keep the disc clean, do not touch the rainbow colored surface.



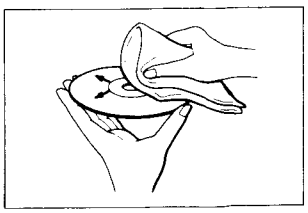
Do not stick paper or tape on the labeled surface.



Do not expose the disc to direct sunlight or heat sources such as hot air ducts, or leave it in a car parked in the direct sunlight where there can be a considerable rise in the temperature.



Before playing, clean the disc with an optional cleaning cloth.
Wipe the disc in the direction of the arrows.

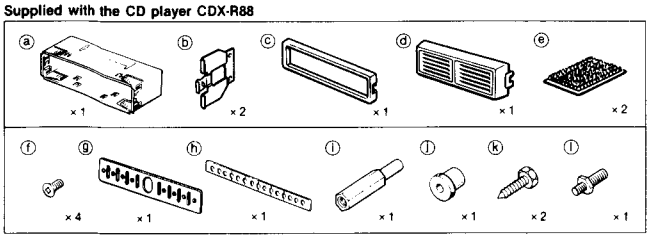


Do not use solvents such as benzine, thinner, commercially available cleaners or antistatic spray intended for analog discs.

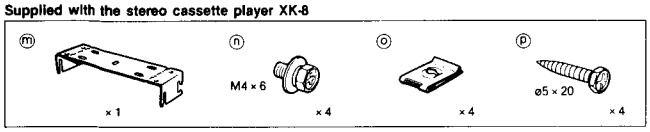
INSTALLATION AND CONNECTIONS

MOUNTING HARDWARE

Supplied with the CD player CDX-R88



Supplied with the stereo cassette player XK-8



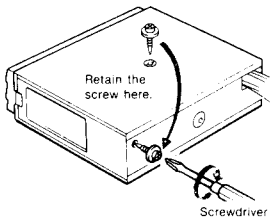
INSTALLATION

PRECAUTIONS

- Choose the mounting location carefully so that the unit will not interfere with the normal driving functions of the driver.
- Avoid installing the unit where it would be subject to high temperatures, such as from direct sunlight or from hot air from the heater, or where it would be subject to dust, dirt or excessive vibration.
- Use only the supplied mounting hardware for a safe and secure installation.

For CDX-R88/R66 only

Transit screw
Be sure to remove the transit screw from the top of the unit. Retain the screw for future transportation as illustrated below.

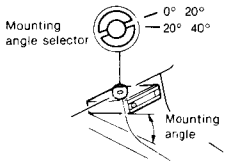


For XK-8 only

Mount the XK-8 with an angle less than 30° from the horizontal level.

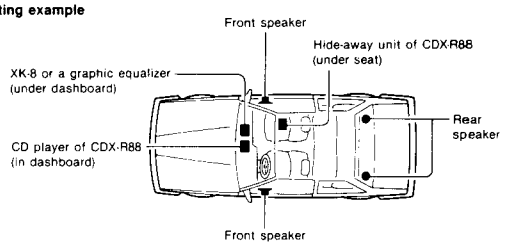
Mounting angle adjustment
To keep balance of the internal anti-shock mechanism, adjust the mounting angle of the CD player according to that of the mounting position.

- If the mounting angle is less than 20° from the horizontal, no ajustment is necessary.
- If it is between 20° and 40°, turn the selector (see illustration) clockwise until it stops.



To return the selector to the original * position, turn it counterclockwise while pressing it with a screwdriver.

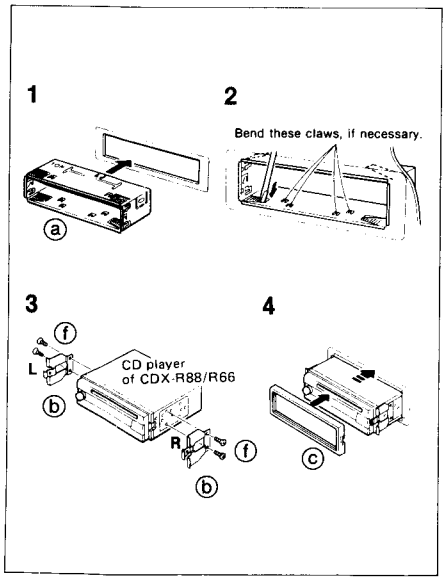
Mounting example


Front speaker
Hide-away unit of CDX-R88 (under seat)
XK-8 or a graphic equalizer (under dashboard)
Rear speaker
CD player of CDX-R88 (in dashboard)
Front speaker

MOUNTING EXAMPLE

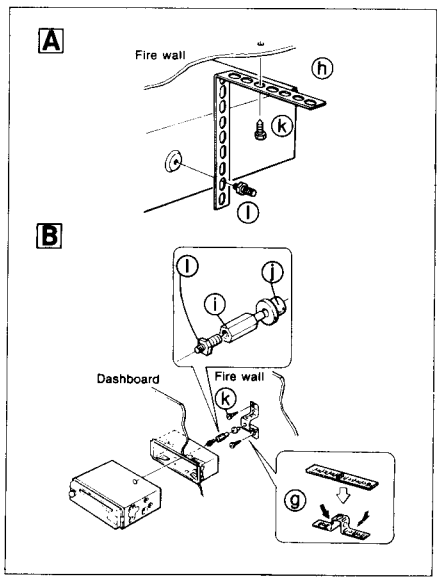
Installation in the dashboard

Use the mounting hardware supplied with the CDX-R88/R66 for mounting the CD player only.

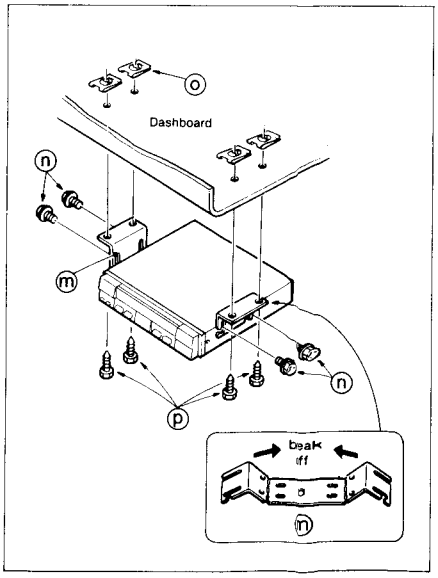


Installation under the dashboard

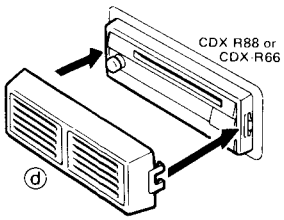
Choose the way Ⓐ or Ⓑ using the mounting hardware supplied with the CDX-R88/R66.



Use the mounting hardware supplied with the stereo cassette player XK-8.

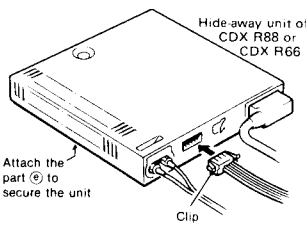


TO LATCH THE PART ⓓ



This prevents your car stereo set from being stolen. Detach it when operating the unit.

CORD ATTACHMENT



To remove, push in the clips and pull it out.

1 Mark the locations of the holes on the bottom of the dashboard using the part ⓜ as a template.
2 Drill 3 mm (⅛ in.) bolt holes.
3 Secure the pieces of part ⓜ which are broken off to the bottom of the dashboard.*
4 Secure the unit to part ⓜ

* If the dashboard or the firewall is thin or made of plastic or a similar material, secure the unit with parts ⓞ and ⓟ. If it is made of metal plate, ⓞ are not necessary.

Notes

- Be sure to use the supplied bolts ⓝ for mounting part ⓜ on the unit. Longer bolts will damage the unit.
- Be careful not to damage wiring or equipment on the other side of the firewall.

CONNECTIONS

CAUTION

- This unit is designed for negative ground 12 V DC operation only.
- Before making connections, disconnect the ground terminal of the car battery to avoid short circuits.
- Connect the red power input lead only after all other leads are connected. And be sure to connect it to the positive 12 V power terminal. It will be energized when the ignition key is set to the accessory position.
- **Run all ground wires to a common ground point.**
- Notes for the CD player only: Be sure to press the reset button after connection is completed.

Notes on speaker connection
- Use speakers with an impedance of 4 to 8 ohms, and with adequate power handling capacities. Otherwise, the speakers may be damaged.
- Do not connect the ⊖ terminals of the speaker system to the car chassis, and do not connect the right speaker with that of the left speaker.
- Do not attempt to connect the speakers in parallel.

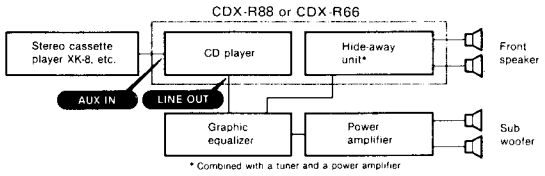
On power antenna connection (for CD player only)
Connect the power antenna relay control lead to the power antenna relay box.
To raise the antenna, press the TUNER button of the CD player to turn on the radio or insert a disc.
To retract the antenna, press the TUNER again to turn the radio off or press the ⏏ button to remove the disc.
Note: A power antenna without relay control box cannot be used with this unit.

Memory hold connection (for CD player only)
When the yellow power input lead is connected as shown below, power will be always supplied to the memory circuit, even when the ignition key is switched off.

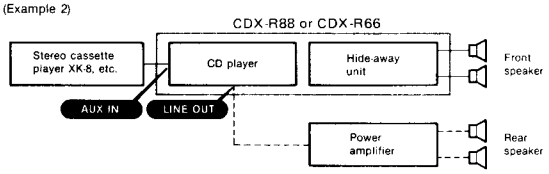
CONNECTION DIAGRAM

According to the unit you have, select the appropriate connection from the following three examples.

(Example 1) A detailed diagram of this example is shown below.



(Example 2)



(Example 3)

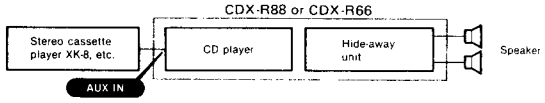
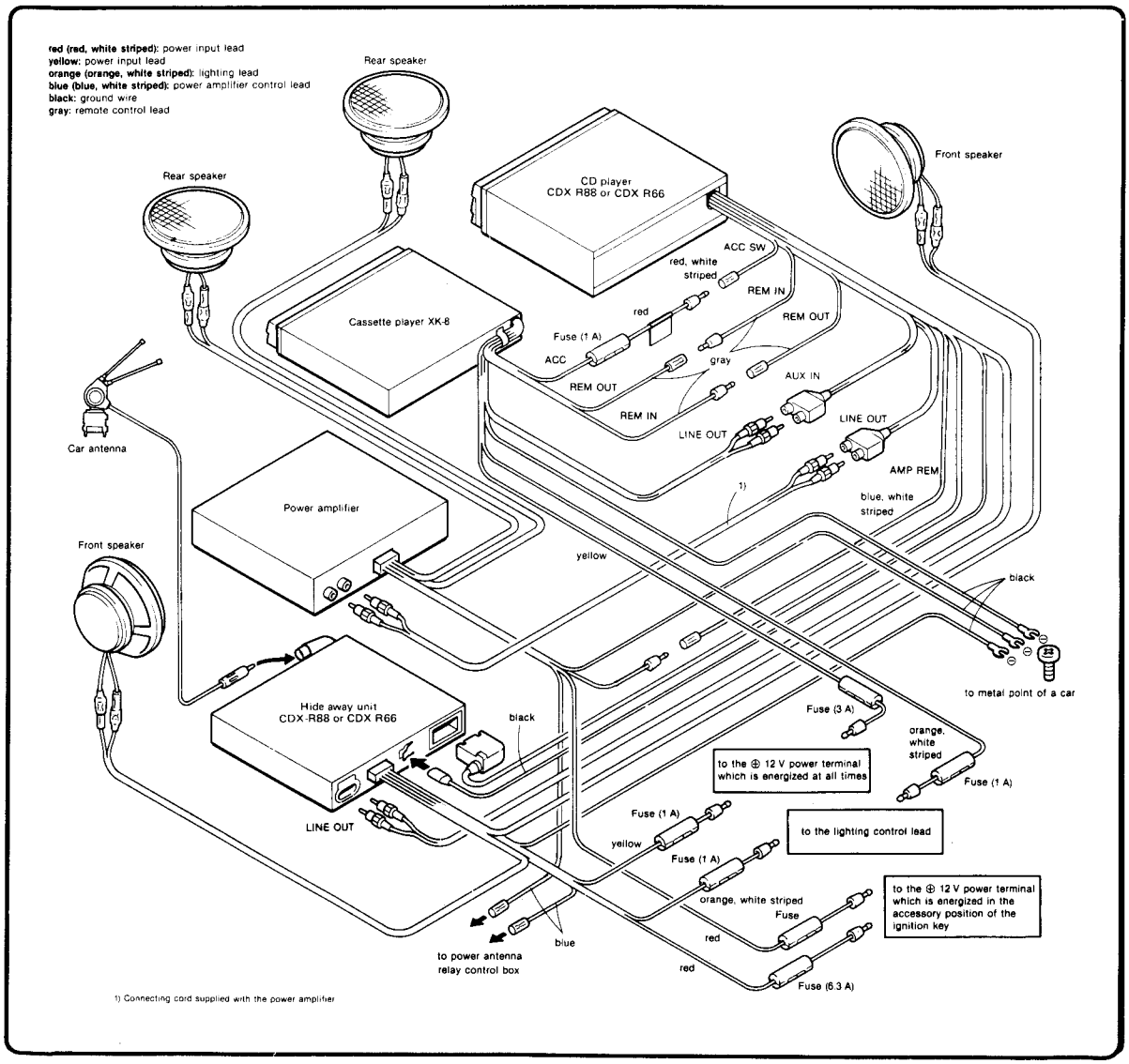
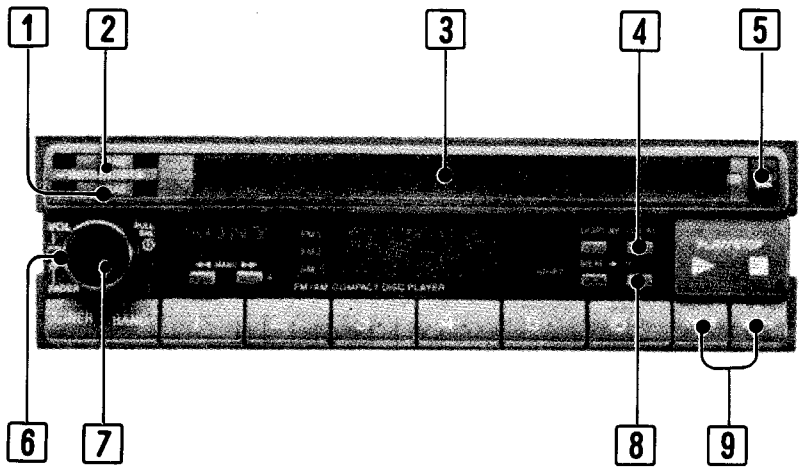


Diagram of example

4- or 2-speaker connection with the CD player and a cassette car stereo



LOCATION AND FUNCTION OF CONTROLS



1 BAS (bass) control
Slide towards + to increase the bass response and towards – to decrease it.

2 TRE (treble) control
Slide towards + to increase the treble response and towards – to decrease it.

3 Disc insertion slot

4 LOCAL button and indicator

5 ⏏ (eject) button

6 Fader control
Turn upwards to decrease the volume of the rear speakers or downwards to decrease the volume of the front speakers.

7 Power switch/VOL (volume)/PULL BAL (balance) control
Depress to turn on the unit. Press again to turn off.
Turn clockwise for more volume.
While pulling out the control, turn it to adjust the balance of the right and left channels.

8 MONO button and indicator

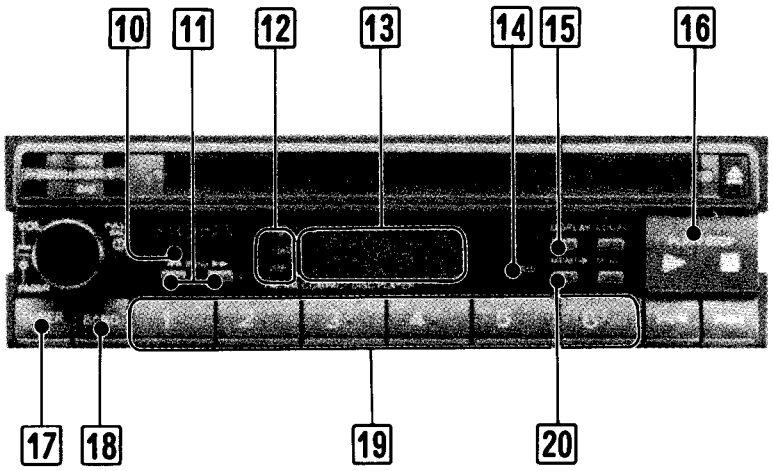
9 ⏮ ⏭ /SEEK buttons
Used for locating the beginning of a desired selection or for automatic tuning

For improved reception
- To receive a weak FM station, press MONO. (The indicator on the button illuminates.) The FM stereo broadcast is received in monaural, but the noise may be reduced.
- To receive very strong FM/AM station or to receive an AM station at night, press LOCAL. (The indicator on the button illuminates.)

When a compact disc is inserted during reception
The radio is turned off.

Display during radio reception
Each time the DISPLAY button is pressed, the display indication will be changed as follows.

Receiving frequency → Current time



10 Reset button
Press this button with a pencil or similar object after battery replacement or when no button or control functions.

11 MANU (manual)/search buttons
Used for manual tuning, for CD search operation, or for setting the clock

12 Band indicators

13 Display window

14 STEREO indicator

15 DISPLAY button
Press repeatedly to change the display information.

16 PLAY/STOP button and indicator (▶ ■)

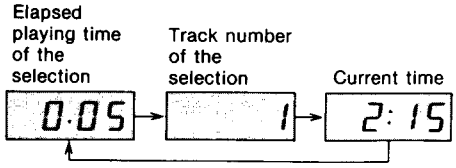
17 TUNER button

18 BAND button

19 Preset buttons
Press to memorize the frequency or to receive a preset station.

20 MEM (memory)/↳ button
Used for locating the beginning of the disc, for memorizing the tuned station, or for setting the clock

Display during play
Each time the DISPLAY button is pressed, the display indication will change as follows.



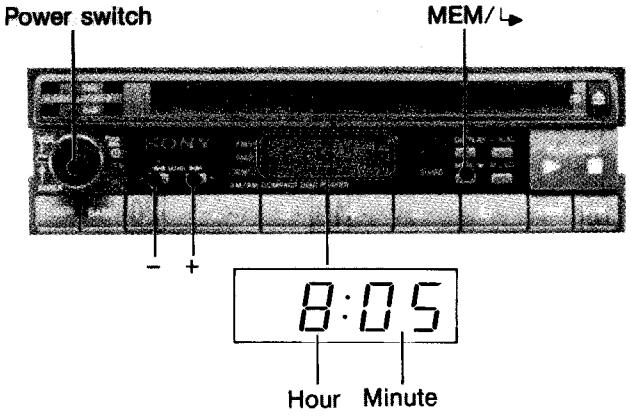
The unit will automatically enter the stop mode when...
- the TUNER button is pressed during disc play.
- the car ignition key is turned off during play and the next time, after more than 15 seconds have passed, the key is set to IGN (ignition) or ACC (accessory) position.

Important
Since the CD system offers a wide dynamic range, the peaks of the high level inputs are recorded with high fidelity, and the noise level is very low. Do not turn up the volume while listening to a portion with no audio signals or very low level inputs. If you do, the speakers may be damaged when a peak level portion is played.

To stop searching
Release the button.
The desired point will be found by observing the display window or monitoring the high-speed sound (only during play).

Keeping the ▶▶ button pressed
The time counter displays "- -" when you have passed the end of the disc. To return to a normal display, press |◀◀ or ◀◀ button.

HOW TO SET THE CLOCK



Before setting the clock • Turn on the car ignition key. • Depress the power switch. • Make sure that no disc is inserted. • Make sure that the tuner is turned off.	**To set hour digits** While pressing MEM/↳, press –. **To set minute digits** While pressing MEM/↳, press +.

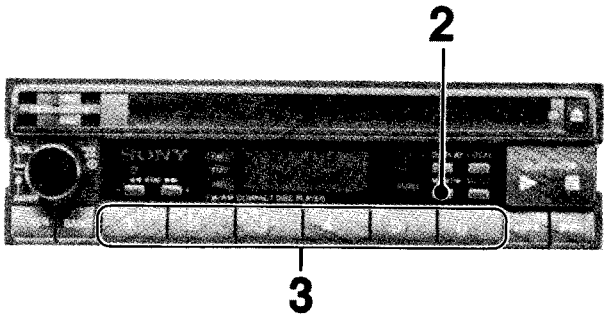
Using – and + buttons
Each time the button is pressed, the digits increase by one. To change the digits quickly, keep it pressed. Release it where you want to stop.

When – is pressed continuously
After 12, the indication returns to 1.

MEMORY PRESET TUNING

Once a station is memorized, single button operation allows you to tune in that station easily.

TO PRESET A STATION



1 **Tune in a desired station** using automatic or manual tuning.

2 **Press MEM.**

3 **Press the desired preset button** while the displayed frequency indication is flickering. The frequency is memorized.

4 **Repeat steps 1 to 3** to preset all the desired stations. For each preset button, one FM1, one FM2 and one AM station can be memorized in the desired order.

TO RECEIVE A MEMORIZED STATION

1 **Select the desired band.**

2 **Press the desired preset button.**

Note
The frequency indication on the display stops flickering in about 5 seconds. If this happens, the preset operation cannot be made. To preset the station, press the MEM button again.

When a new frequency of the same band is memorized
The previous memorized frequency will be erased.

ON AM TUNING INTERVAL (E model only)

The interval is factory-set according to the AM frequency allocation of your country.

9 kHz area	European, Asian, African and Ocean countries
10 kHz area	North, Central and South America

If, however, AM frequency allocation might be different from that shown in the list, change the AM tuning interval.

To change the AM tuning interval (adjustable only with E model)

1 Disconnect the yellow power input lead, and make sure that nothing is displayed on the display window.

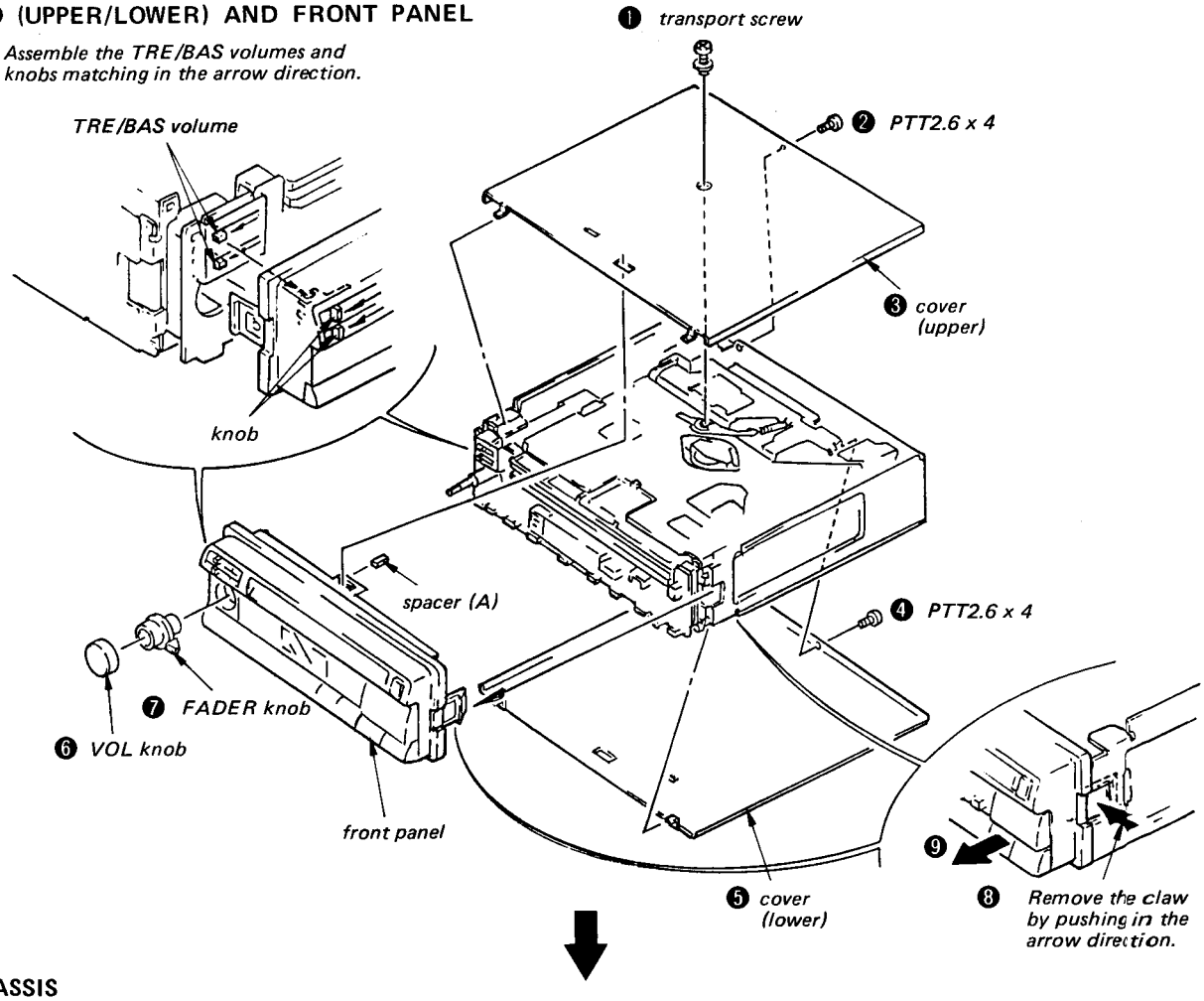
2 Set the AM tuning interval selector located at the bottom of the CD player to the proper position. Use a ball-point pen or a similar object.

SECTION 1
DISASSEMBLY

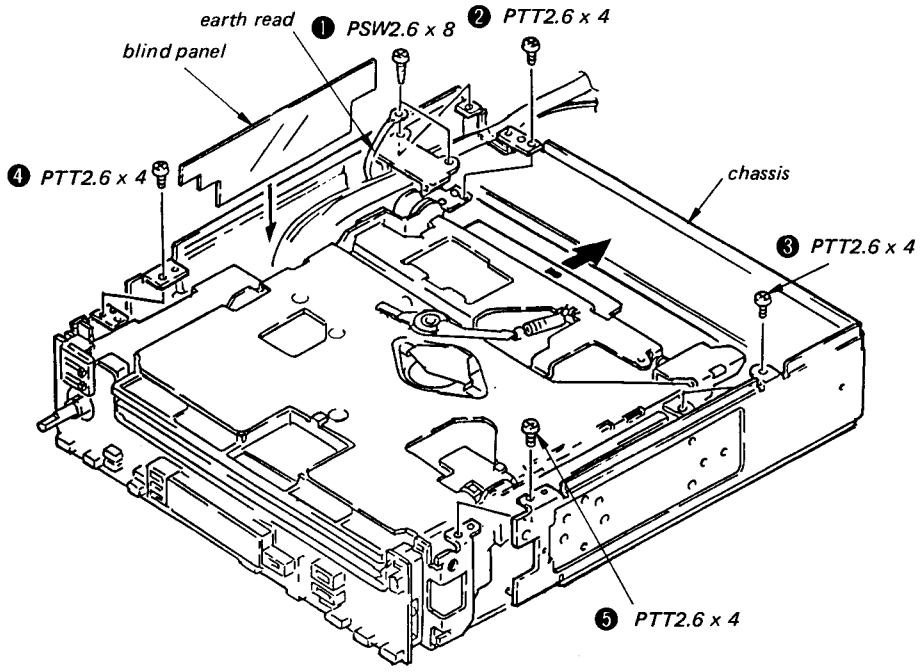
Note: Follow the disassembly procedure in the numerical order given.

1-1. REMOVAL

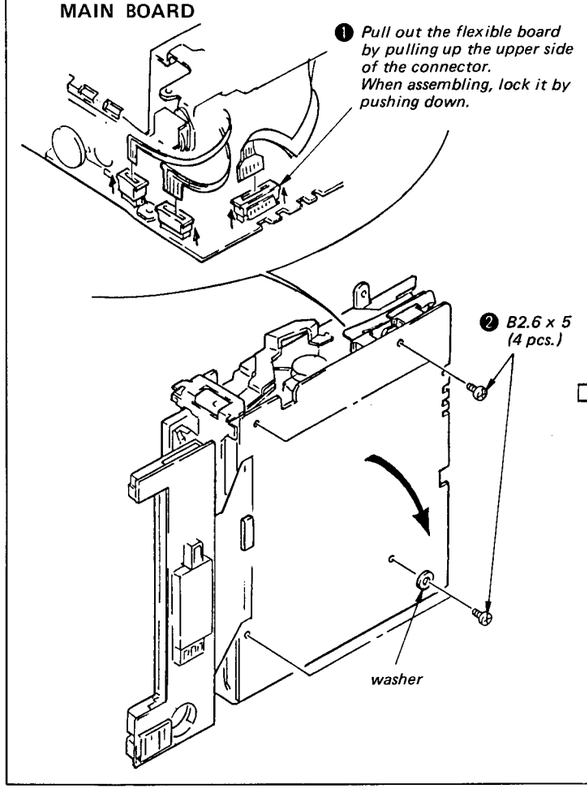
LID (UPPER/LOWER) AND FRONT PANEL

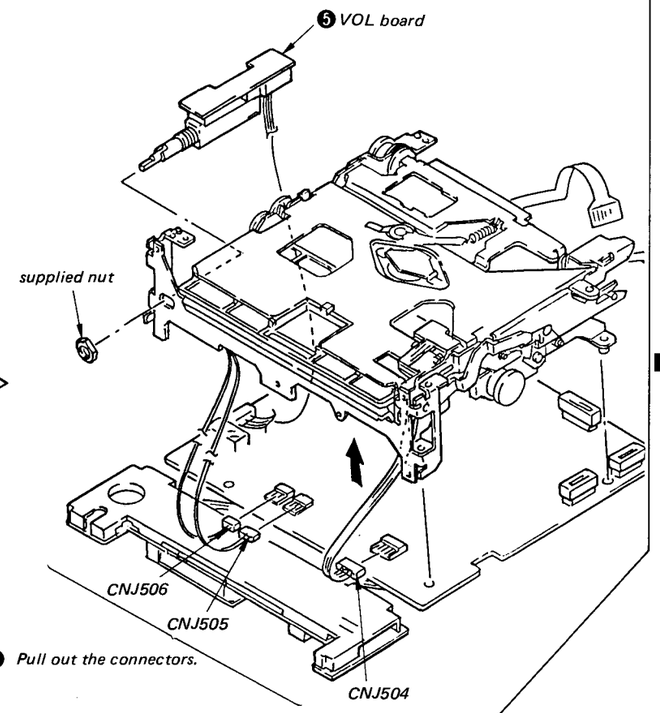


CHASSIS

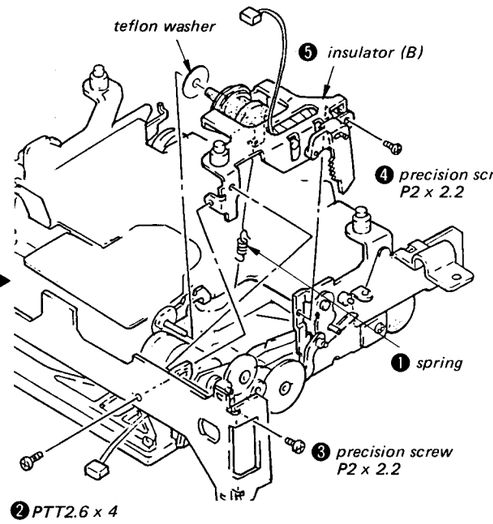


MAIN BOARD

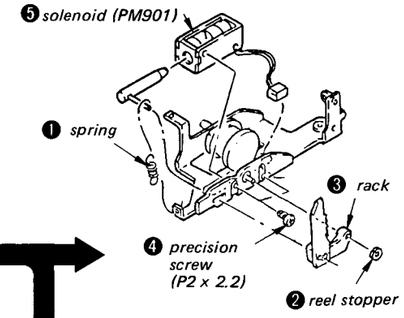

❶ Pull out the flexible board by pulling up the upper side of the connector. When assembling, lock it by pushing down.
❷ B2.6 x 5 (4 pcs.)
washer



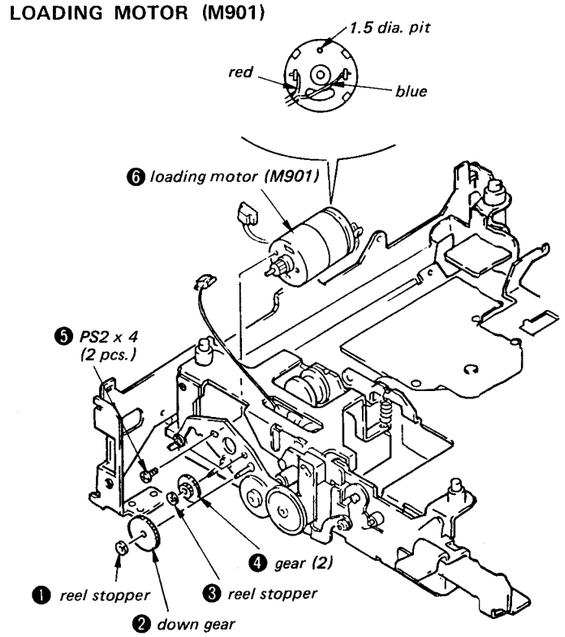
INSULATOR (B)



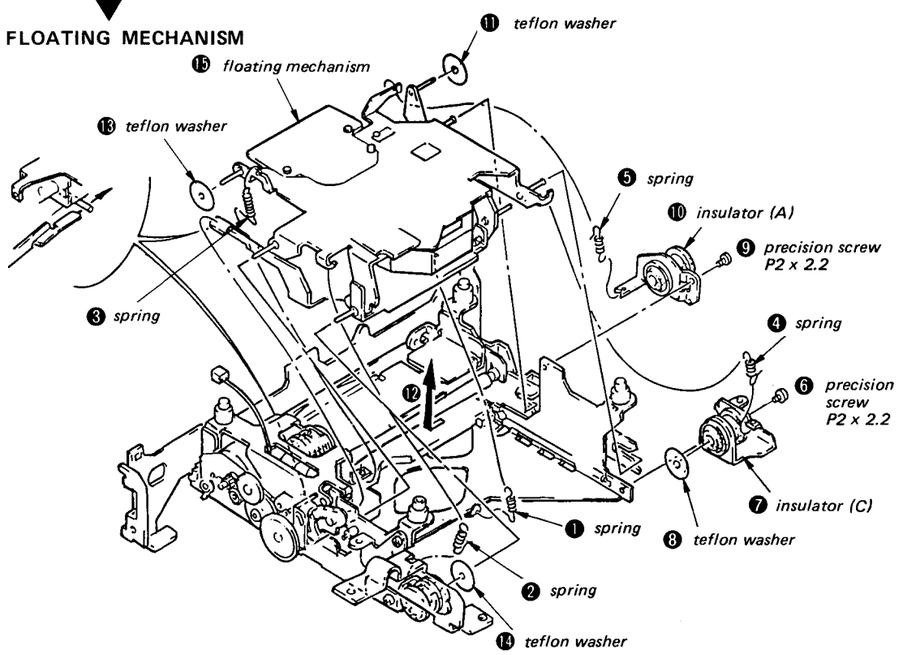
SOLENOID (PM901)



LOADING MOTOR (M901)

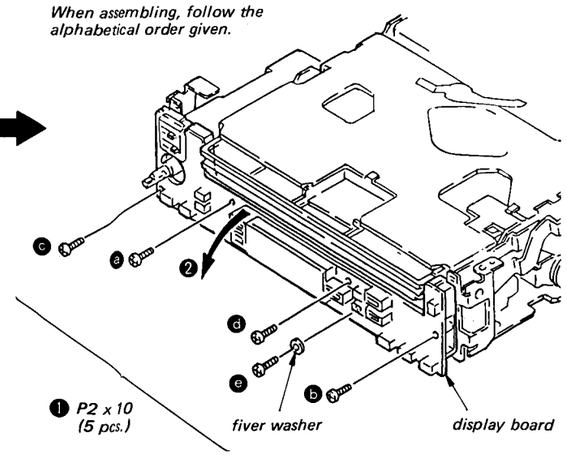


FLOATING MECHANISM



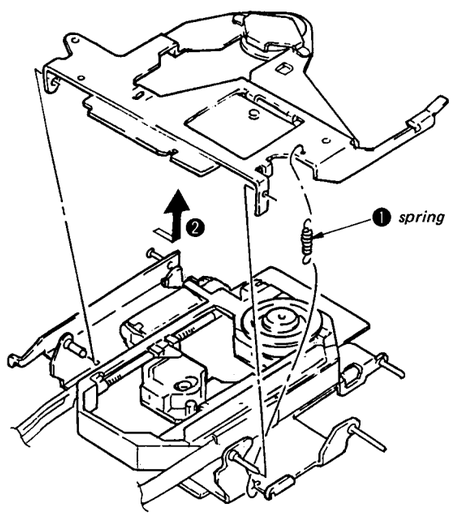
DISPLAY BOARD

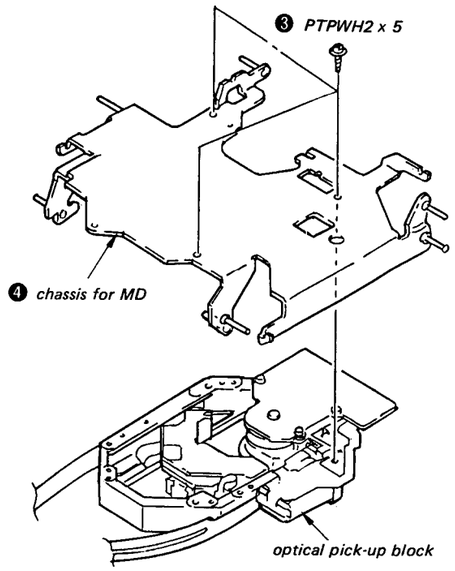
When assembling, follow the alphabetical order given.



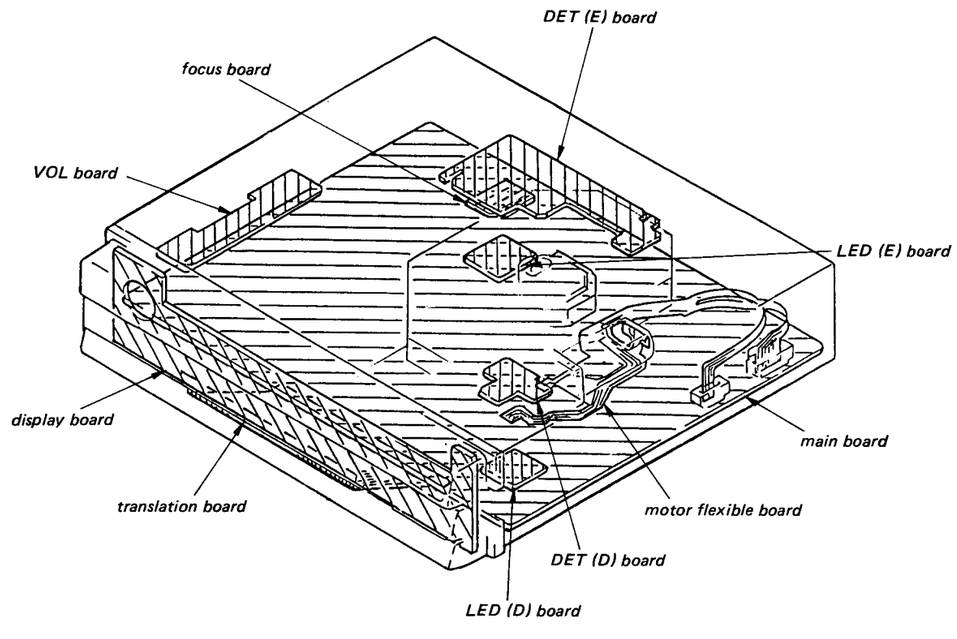
FLOATING MECHANISM
(See page 11.)

OPTICAL PICK-UP BLOCK

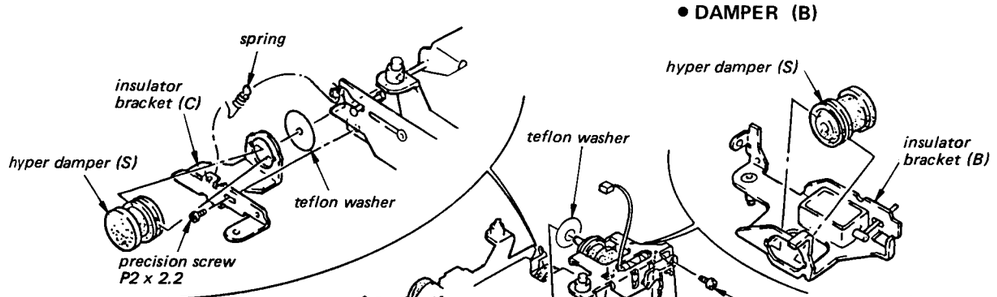




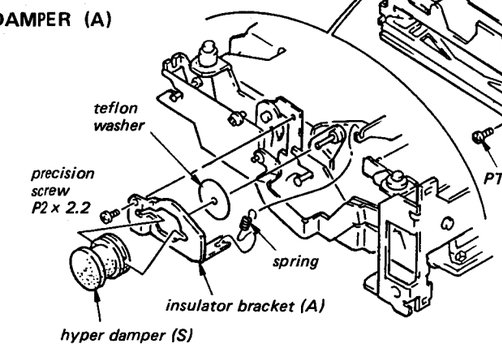
• CIRCUIT BOARDS LOCATION OF CD PLAYER SECTION

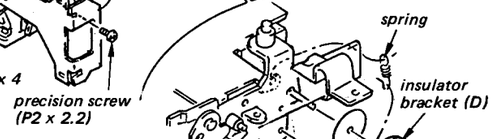


• DAMPER (B)

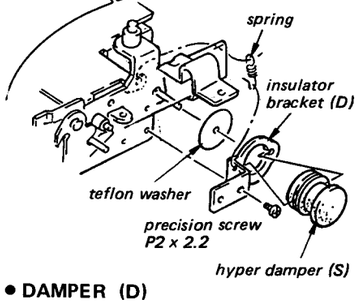


• DAMPER (A)





• DAMPER (D)



SECTION 2
ELECTRICAL ADJUSTMENTS

HIDE-AWAY SECTION

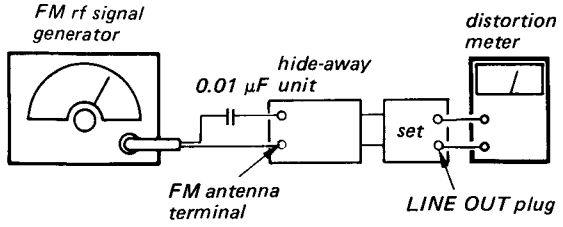
The FM front-end and the AM tuner unit are carefully adjusted at the factory and are supplied as one whole block for replacement.

FM Discriminator Alignment

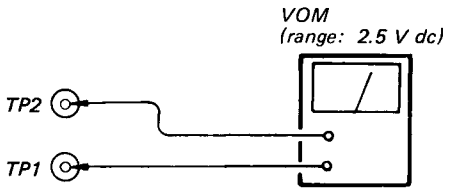
Setting:

LOCAL button: OFF
MONO button: ON

Procedure:

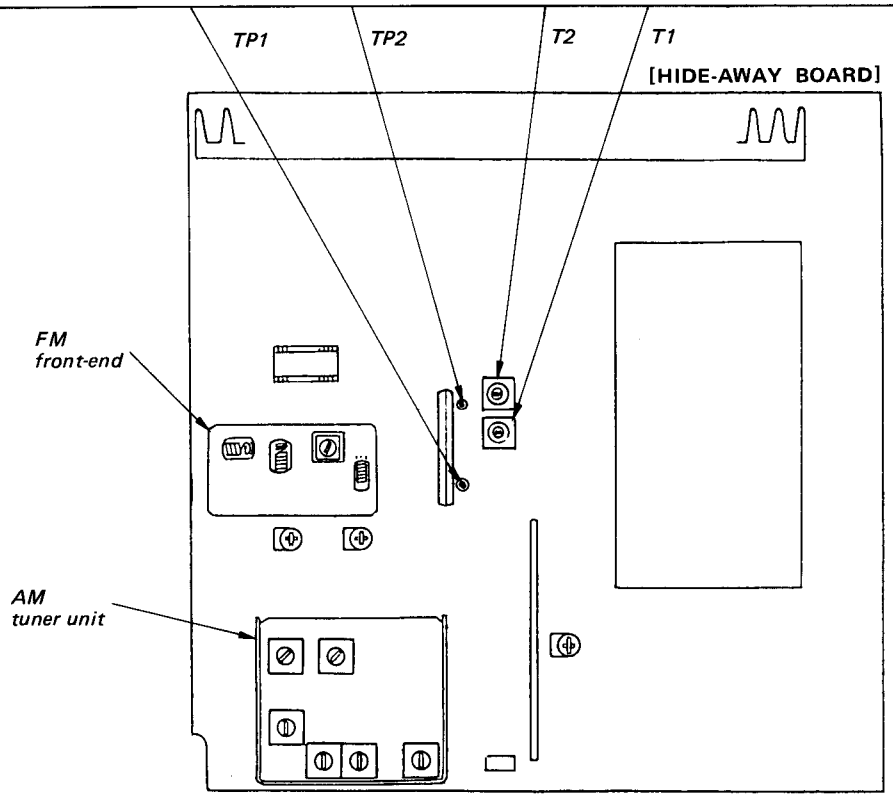


Carrier frequency: *98.1 MHz*
Output level: *1 mV (60 dB)*
Modulation: *1 kHz, 75 kHz deviation (100%)*



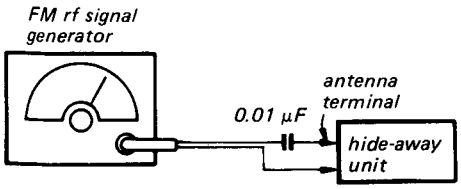
1. Tune the set to 98.1 MHz.
2. Connect a VOM to NULL test point (TP1, TP2) and adjust the primary-side core (T1) for 0 V DC reading on the VOM.
3. Adjust the secondary-side core (T2) for a minimum reading on the distortion meter.

Note: Repeat the secondary-side and primary-side adjustments several times, and they should be finally done by the primary-side core (T1).

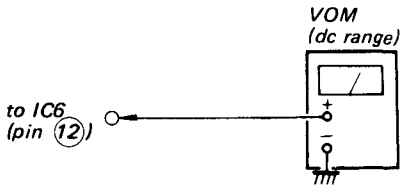


FM Auto-scan Stop Level Adjustment

Setting:
LOCAL button: OFF
MONO button: OFF

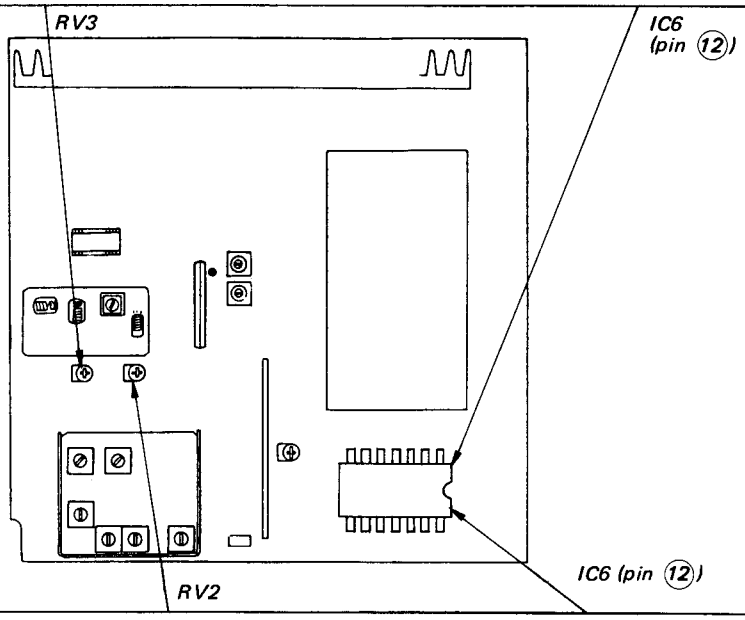


Carrier frequency: *98.1 MHz*
Mode: *monaural, no modulation*
Output level: *60 dB (1 mV), 25 dB (18 µV)*



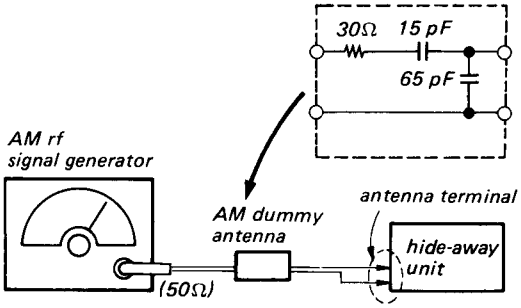
Procedure:

1. Set FM rf signal generator output level to 60 dB.
2. Tune the set to 98.1 MHz.
3. Set FM rf signal generator output level to 25 dB.
4. Adjust RV3 at the point where VOM reading suddenly changes.
5. Change the FM rf signal generator output and confirm that the point where VOM reading suddenly changes is 35 ±5 dB (30 dB to 40 dB).

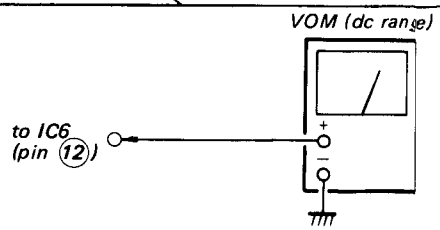


AM Auto-scan Stop Level Adjustment

Setting: LOCAL button: OFF



1000 kHz or 999 kHz, 60 dB (1 mV), 35 dB (56 µV) no modulation



Procedure:

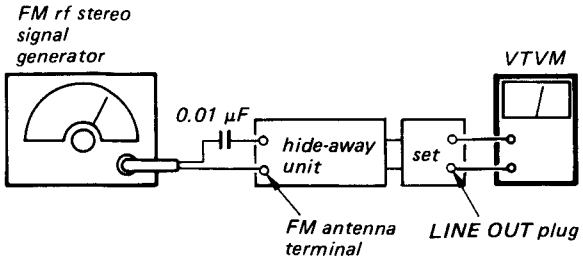
1. Set AM rf signal generator output level to 60 dB.
2. Tune the set to 1000 kHz or 999 kHz.
3. Set AM rf signal generator output level to 35 dB.
4. Adjust RV2 at the point where VOM reading suddenly changes.
5. Change the AM rf signal generator output and confirm that the point where VOM reading suddenly changes is 35 ±5 dB (30 dB to 40 dB).

FM Stereo Separation Adjustment

Setting:

LOCAL button: OFF
MONO button: OFF

Procedure:



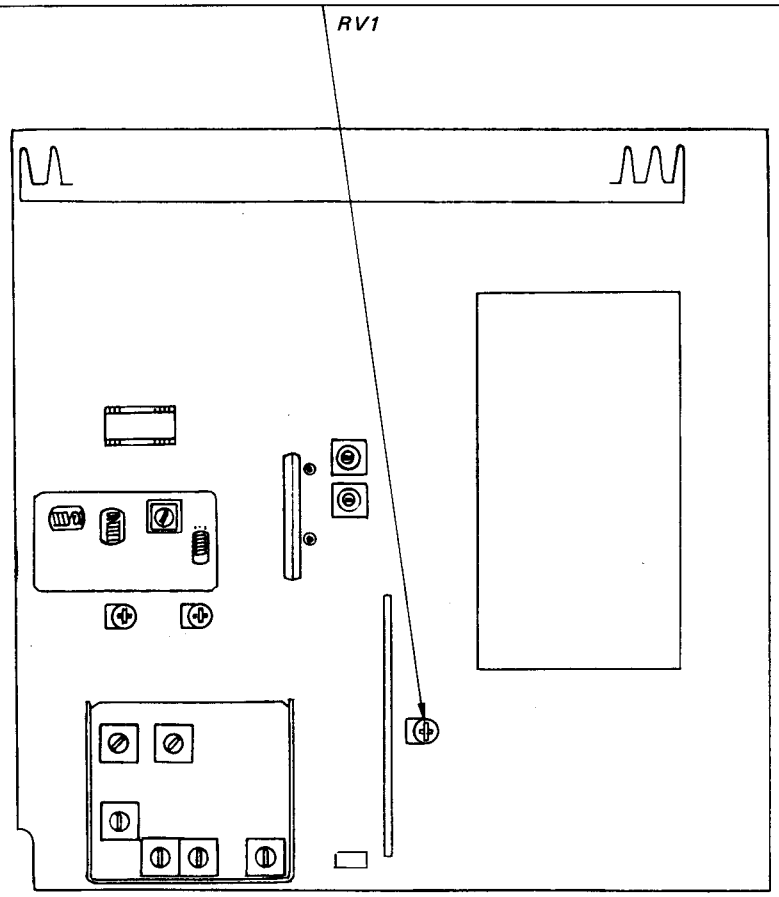
Carrier frequency: 98.1 MHz
Output level: 1 mV (60 dB)
Modulation:

Audio (1 kHz): 33.75 kHz deviation (45%)
Pilot (19 kHz): 7.5 kHz deviation (10%)
Sub-channel (38 kHz): 33.75 kHz deviation (45%)

FM stereo signal generator output channel	VTVM connection	VTVM reading (dB)
L-CH	L-CH	Ⓐ
R-CH	L-CH	Ⓑ Adjust RV1 for minimum reading.
R-CH	R-CH	Ⓒ
L-CH	R-CH	Ⓓ Adjust RV1 for minimum reading.

L-CH Stereo separation: Ⓐ – Ⓑ
R-CH Stereo separation: Ⓒ – Ⓓ

The separations of both channels should be equal.



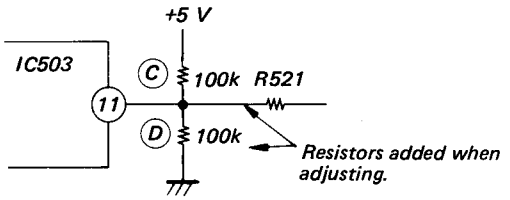
CD PLAYER SECTION

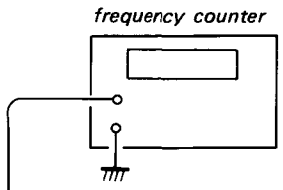
1. Perform adjustments as given.
2. Be sure to use the disc "YEDS-18" parts code: 3-702-101-01, but only when indicated.
3. Power supply voltage: DC 14.4 V (more than 2A)

PLL Free Run Frequency Adjustment

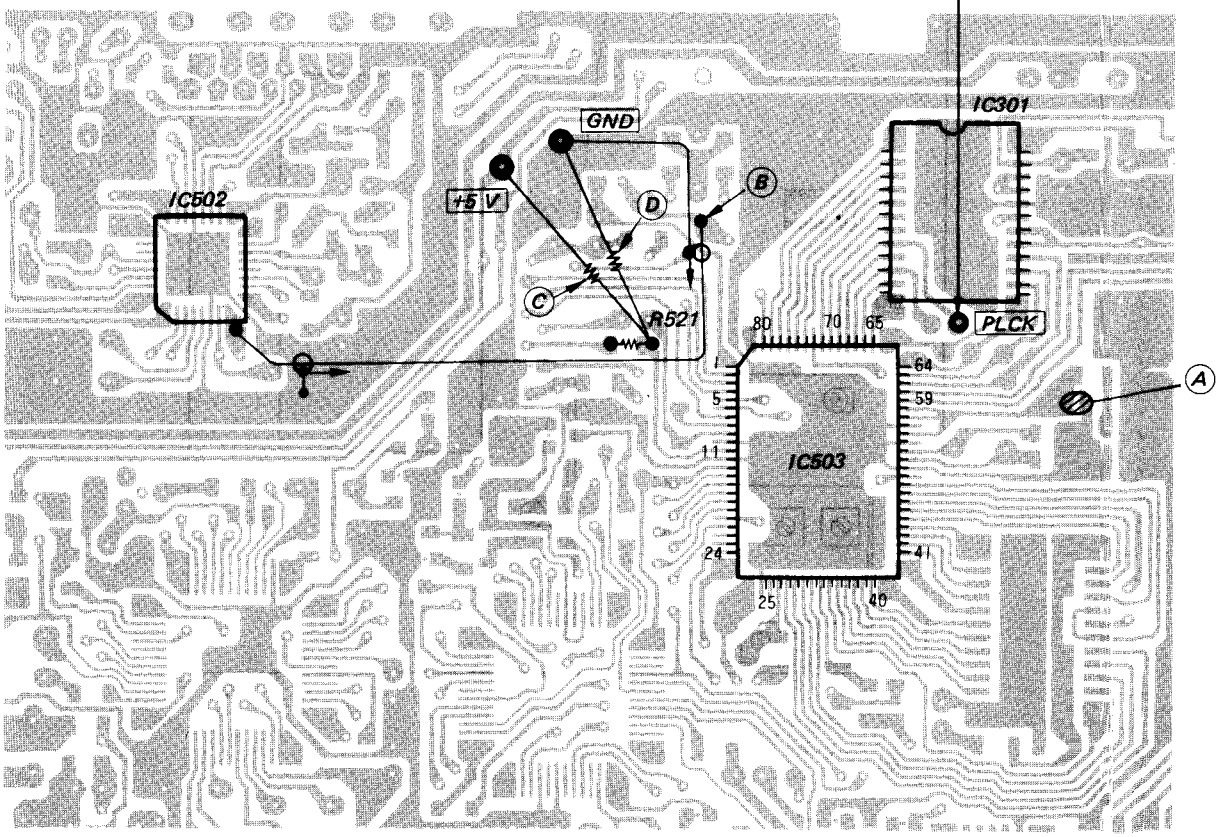
Procedure:

1. Solder-bridge the main board point Ⓐ. (IC503 pin 59 is grounded)
2. Remove main board point Ⓑ leads. (Disconnect IC503 pin 5)
3. Connect 100 kΩ resistors to Ⓒ, Ⓓ. (This is to adjust the IC503 pin 11 voltage to 2.5 V)
4. Connect the frequency counter to main board test point PLCK (IC503 pin 70).
5. Turn the power switch on (Do not use the disc), then adjust RV505 so that the frequency is 4.3218 MHz ±10 kHz.
6. After adjusting, reset 1, 2 and 3 as original.



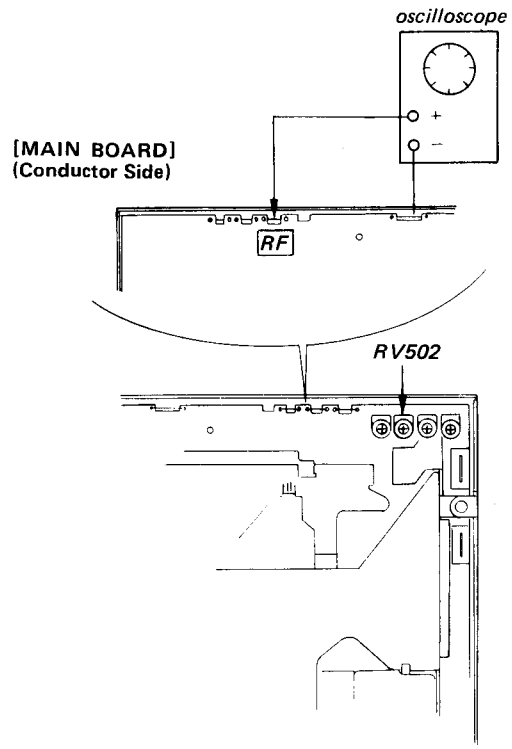


[MAIN BOARD]



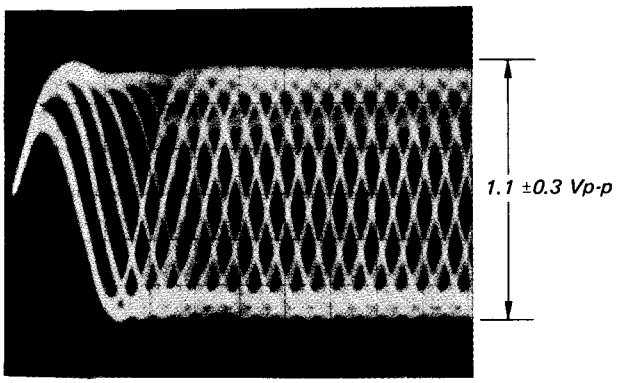
Focus Offset Adjustment

Procedure:



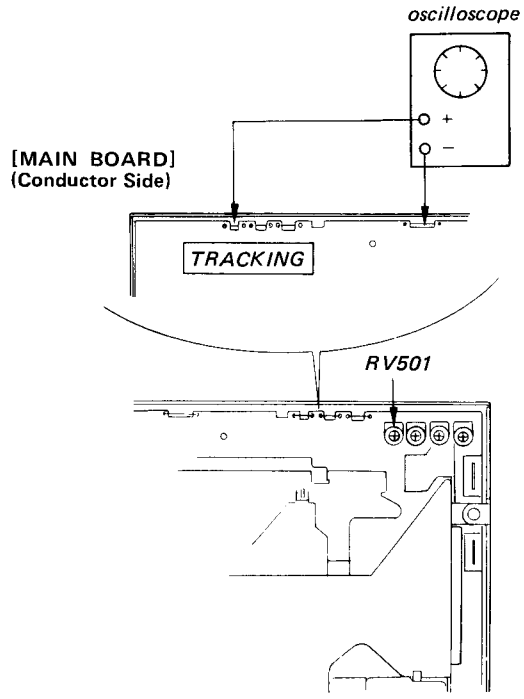
1. Connect the oscilloscope to main board test point RF.
2. Put the set into play mode by loading the disc.
3. Adjust main board RV502 so that the oscilloscope waveform eye pattern is good.
   A good eye pattern means that the diamond shape (◇) in the center of the oscilloscope can be clearly distinguished.

Volt/Div: 200 mV
Time/Div: 0.5 µSec



Tracking Offset Adjustment

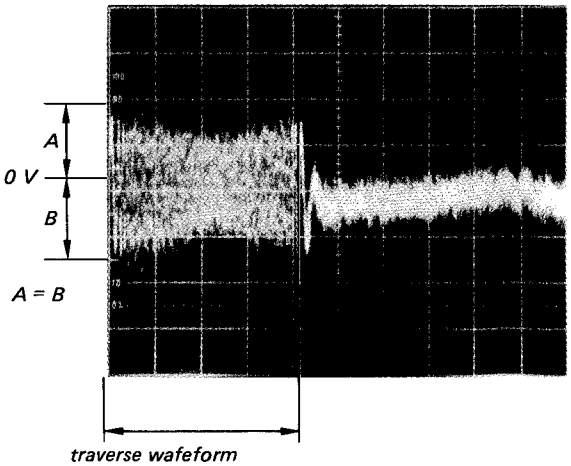
Procedure:



1. Connect the oscilloscope to main board test point TRACKING.
2. Put the set into play mode by loading the disc.
3. Press the |◀◀ or ▶▶| (or ◀◀ , ▶▶) button, then check the traverse waveform*.
4. Adjust RV501 (main board) so that oscilloscope reading is symmetrical in relation to 0 V.

*Traverse waveform: This is the tracking error waveform appears when crossing the track.

Volt/Div: 0.5 V
Time Div: 2 mSec
Center 0 V



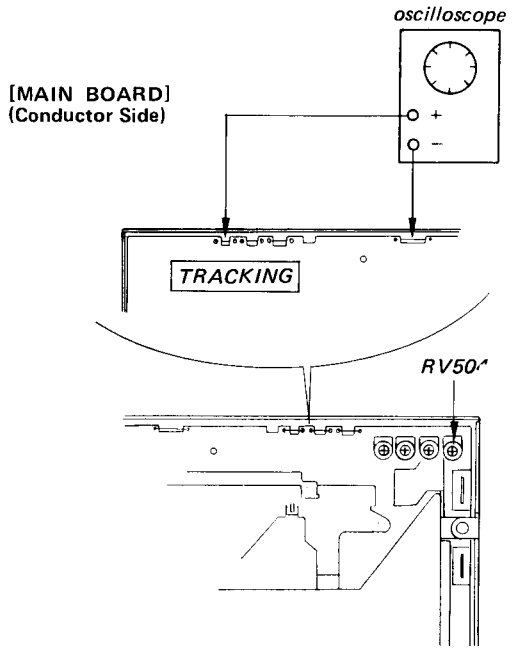
Tracking Gain Adjustment (rough adjustment)

This adjustment is to be performed when replacing the following parts.

- Optical Pick-up Block
- RV504

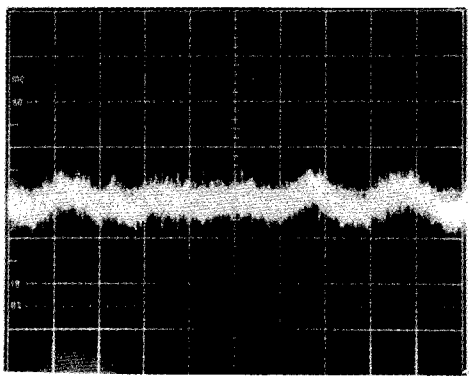
This adjustment should be performed after focus offset and tracking offset adjustment is completed.

Procedure:

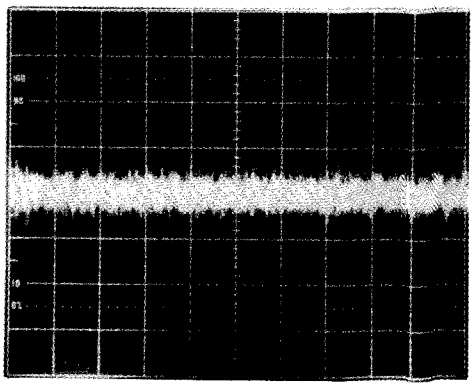


1. Connect the oscilloscope to main board test point TRACKING .
2. Put the set into play mode by loading the disc.
3. Turn main board RV504 counterclockwise, then check the ocilloscope waveform.
   Fix RV504 to the position that the waveform disappears.

Volt/Div: 0.5 V
Time/Div: 2 mSec

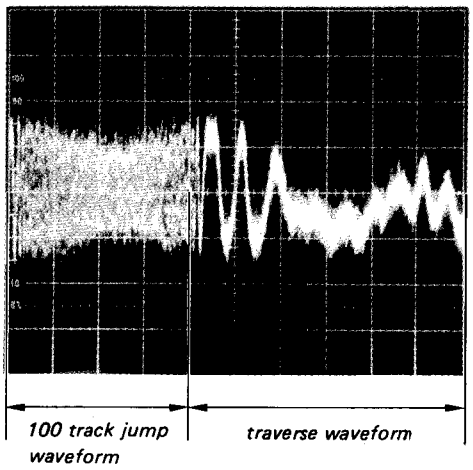


waveform when the wave appears

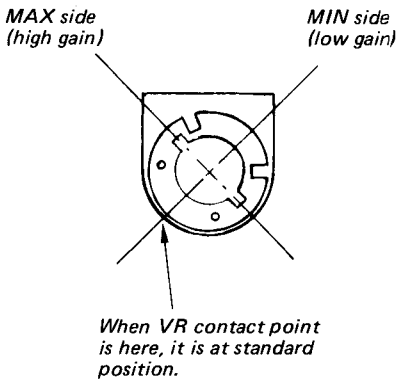


waveform when the wave disappeared

- **When gain is lowered . . .**
  When selecting by pressing |◀◀ or ▶▶| button, brake application is poor because of low tracking gain. Therefore, the traverse waveform appears after the 100 track jump waveform, then the selection will be located slowly.



- **When gain is highered . . .**
  Operation noise is heard due to a scratch or dust, then operation will be instability.



RV503 standard position

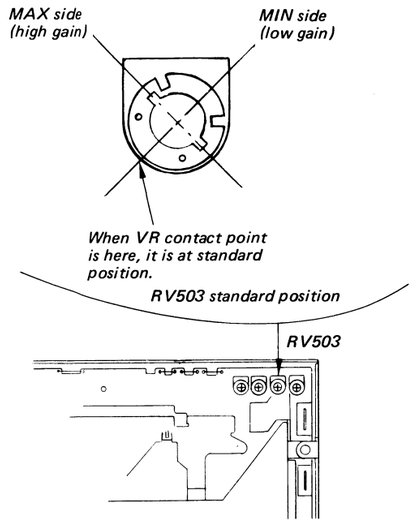
Focus Gain Adjustment (rough adjustment)

This adjustment is to be performed when replacing the following parts.

- Optical Pick-up Block
- RV503

Procedure:

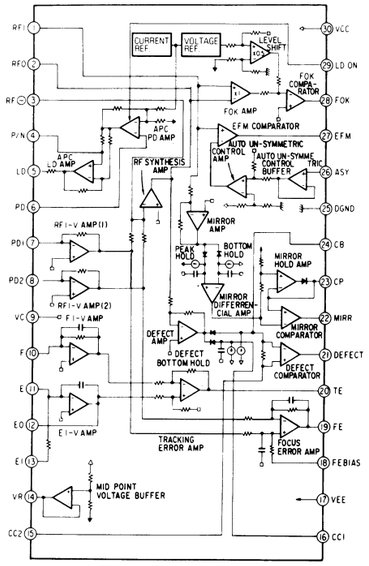
1. Set RV503 (main board) to the standard position.
2. Check that there is not an abnormal amount of operation noise (white noise) from the 2-axis devise. If there is, turn RV503 slightly counter-clockwise.



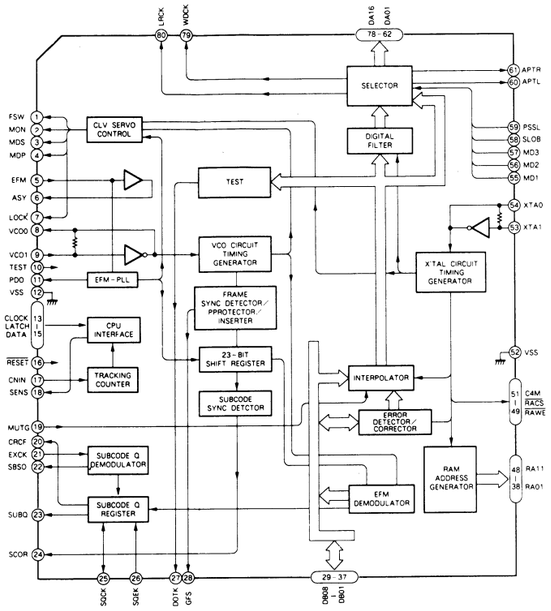
- **When gain is lowered . . .**
  The set does not play because of no focus operation.
- **When gian is highered . . .**
  Operation noise is heard due to a scratch or a dust, then operation will be instability.

• IC BLOCK DIAGRAMS FOR DISC PLAYER SECTION

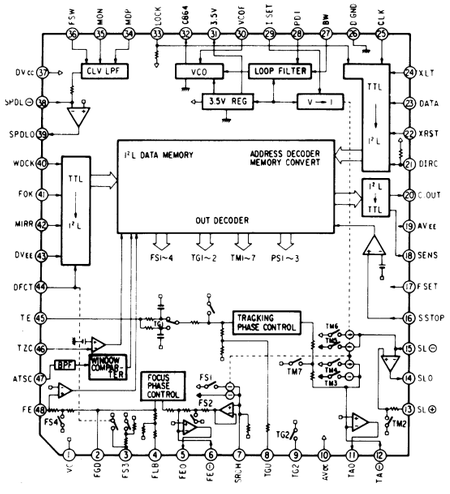
IC501 CXA-1081Q



IC503 CXD1130Q



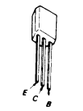
IC502 CXA1082Q



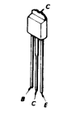
• Semiconductor Lead Layouts

2SA812
2SA1344
2SA1510
2SB1123
2SC2712
2SC2812L-7
2SC3395
2SC3398
2SD1623-K
DTA144WK
DTB113EK
DTB123YK
DTD113ZK
DTD114EK

2SA1348
2SA1503
2SC634SP
2SC2458-Y



2SB1202



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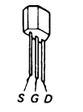
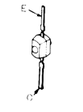


PN147-LF



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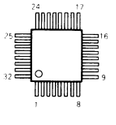
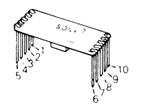


CXA1082AQ
MB88505-501M
MB88505-502M



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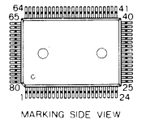

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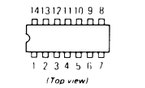
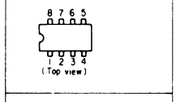


L272M



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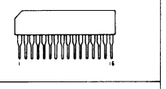
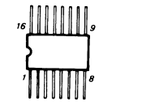


LC74HC365M



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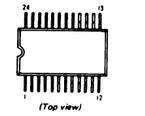
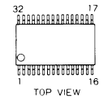
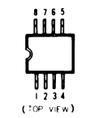
PCM551-1P-S
μPD82C43G



M54940FP



M5203FP
μPC4560G2



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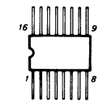
TC4053BF



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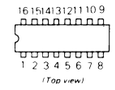
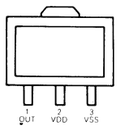
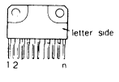


S-8054HN



STK3400

TA7281P



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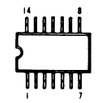
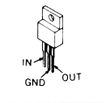


μPC78M08H



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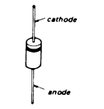
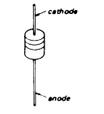
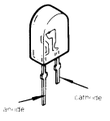
10E2
ERB12-01RK



1SS133
RD3.6ES-B1
RD5.6ES-B3
RD7.5ES-B
RD10ES-B2
RD16ES-B



BR4868K



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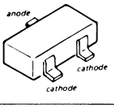
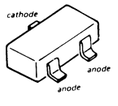
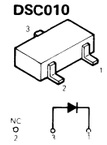


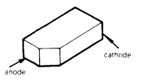
DCB015



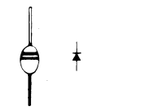
DSC010



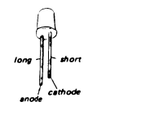
LN1261C
LN1451C



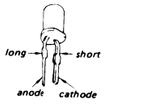
U05G



AA3668S
BG3668S



TCR123



SECTION 3
DIAGRAMS

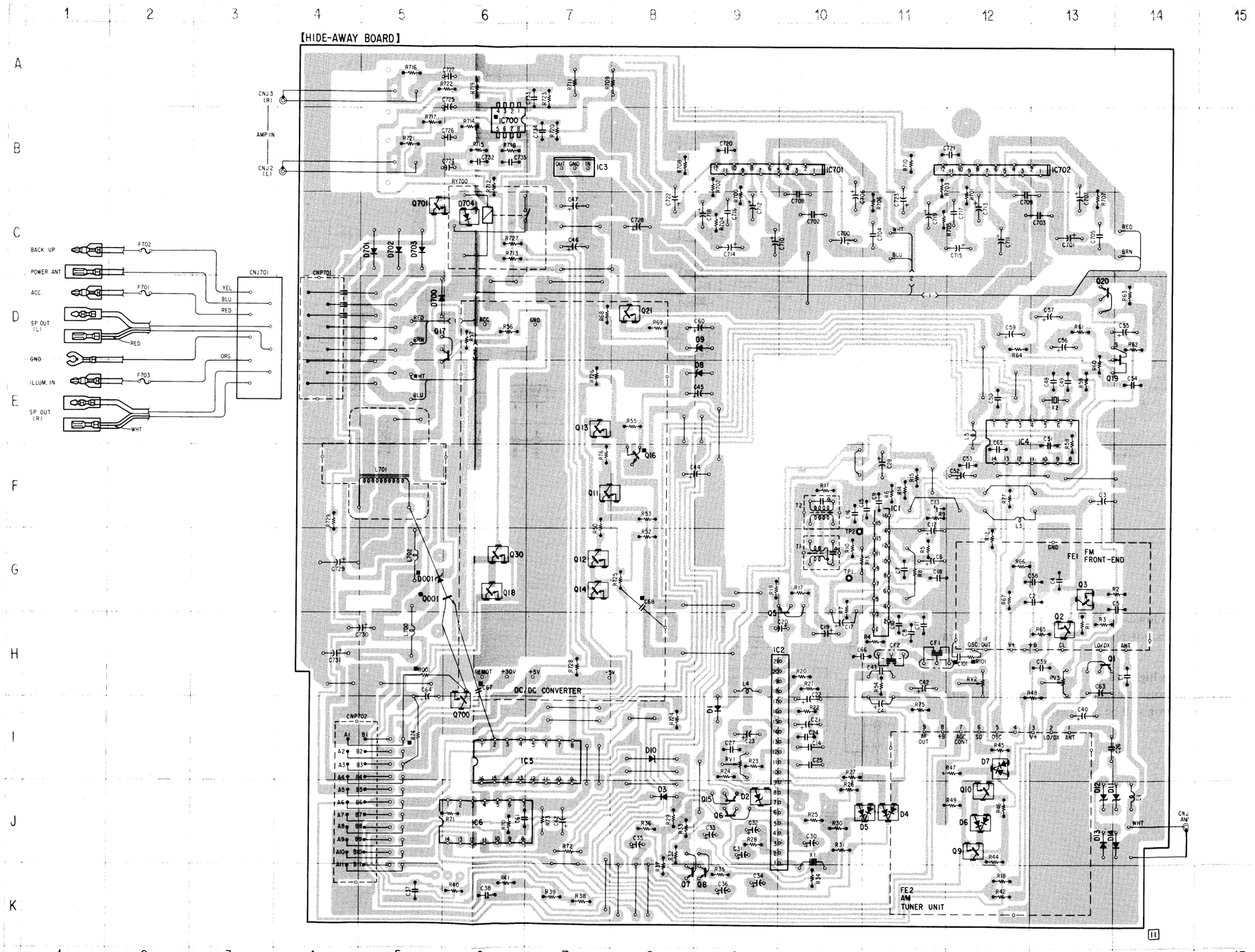
3-1. MOUNTING DIAGRAM – HIDE-AWAY SECTION –

– Conductor Side –

● See page 22 for Semiconductor Lead Layouts.

● SEMICONDUCTOR LOCATION

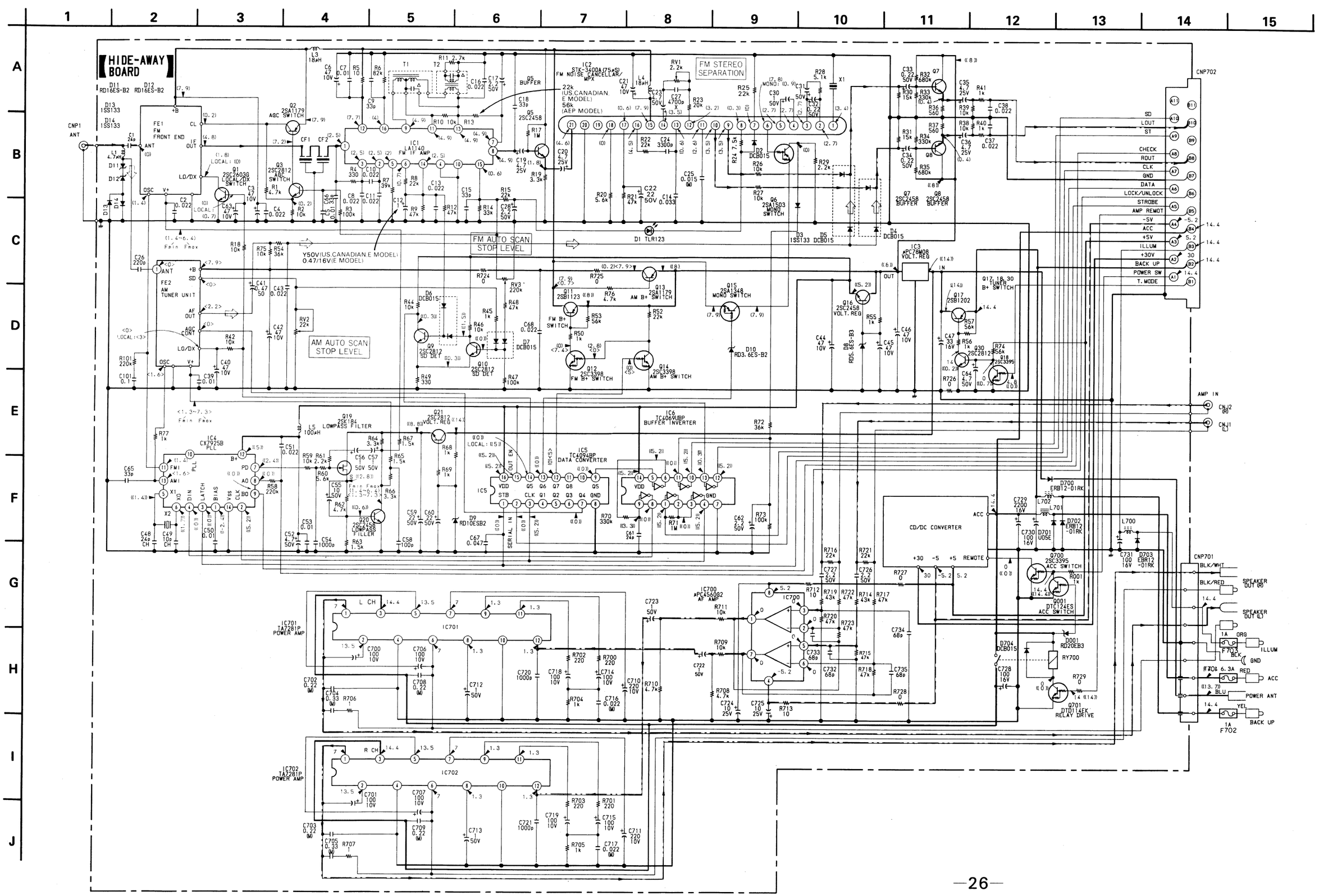
Ref. No.	Location	Ref. No.	Location
D001	G-5	Q001	G-6
D1	I-9	Q1	H-13
D2	J-9	Q2	H-13
D3	J-8	Q3	G-13
D4	J-11	Q5	G-10
D5	J-11	Q6	J-9
D6	J-12	Q7	K-8
D7	I-12	Q8	K-9
D8	E-9	Q9	J-12
D9	D-9	Q10	J-12
D10	I-8	Q11	F-7
D11	J-14	Q12	G-7
D12	J-13	Q13	E-7
D13	J-13	Q14	G-7
D14	J-14	Q15	J-9
D700	D-5	Q16	F-8
D701	C-5	Q17	D-5
D702	C-5	Q18	G-6
D703	C-5	Q19	E-13
D704	C-6	Q20	D-13
		Q21	D-8
IC1	G-11	Q30	G-6
IC2	H-10	Q700	I-6
IC3	B-7	Q701	C-5
IC4	E-12		
IC5	I-7		
IC6	J-6		
IC700	B-6		
IC701	B-9		
IC702	B-12		



Note:

● ■ : part mounted on the conductor side.

3-2. SCHEMATIC DIAGRAM – HIDE-AWAY SECTION –

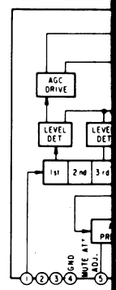


Note on Schema

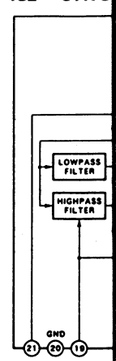
- All capacito
  50WV or le
  and tantalun
- All resistors
  specified.
- ▬▬ : B+
- ▬ ▬ : B–
- ▭ : adju
- ▬▶ : F
- ▨ : A
- ▬▶ : S
- ▬·▶ : S
- Power voltag
  power supply
- Voltages are
  noted.
- Readings are
  with a VOM
  no mark : CD
  ( ): FM
  < >: AM
  (( )): TU
  LOCAL : LO
  MONO : MO
  LOAD : du
  UNLOAD: d
- Voltage varia
  tion tolerance
- Waveforms a
  using oscillos
  Voltage varia
  tion tolerance

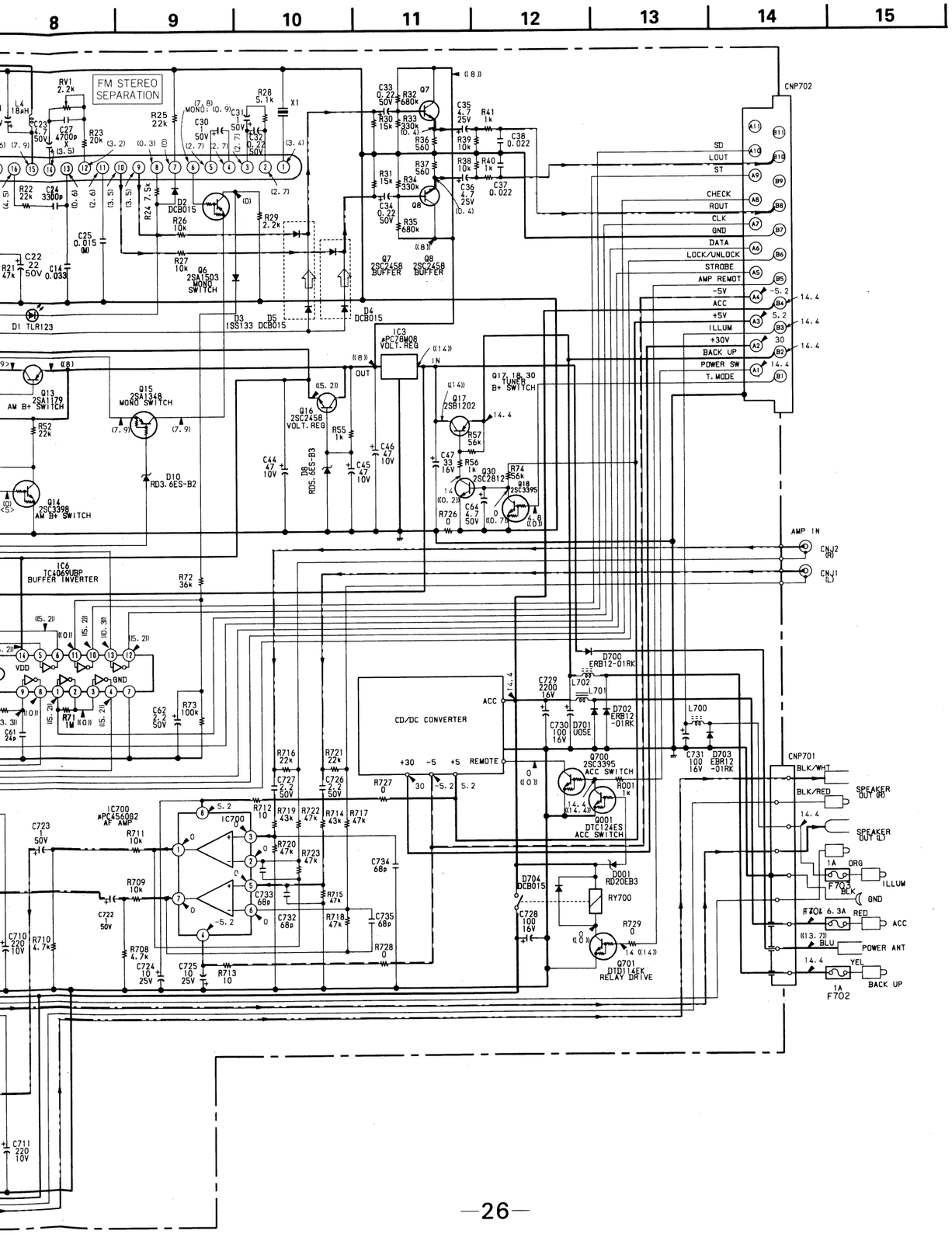
● IC BLO

IC1 LA114



IC2 STK-3



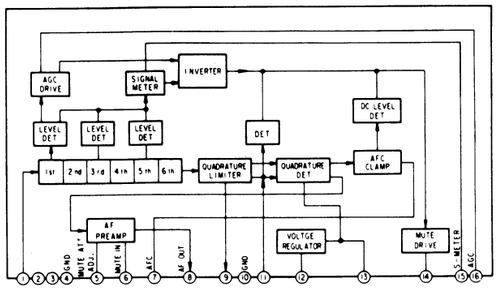


Note on Schematic Diagram:

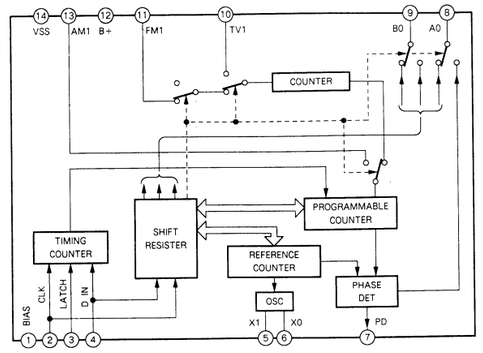
- All capacitors are in μF unless otherwise noted. pF: μμF 50WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and ¼ W or less unless otherwise specified.
- ▬▬ : B+ bus.
- ▬ ▬ : B− bus.
- ▭ : adjustment for repair.
- ▬▸ : FM signal path.
- ▨ : AM signal path.
- ▬▸ : L-CH signal path.
- ▬·▸ : R-CH signal path.
- Power voltage is 14.4 V dc and fed with the regulated dc power supply from ACC and BACK UP terminals.
- Voltages are dc with respect to ground unless otherwise noted.
- Readings are taken under no-signal (detuned) conditions with a VOM (50 kΩ/V).
  no mark : CD playing mode
  ( ) : FM
  < > : AM
  (( )) : TUNER
  } detuned
  LOCAL : LOCAL LED lighting up mode
  MONO : MONO LED lighting up mode
  LOAD : during disc loading in
  UNLOAD: during disc loading out
- Voltage variations may be noted due to normal production tolerances.
- Waveforms are taken to ground in CD playing mode by using oscilloscope.
  Voltage variations may be noted due to normal production tolerances.

• IC BLOCK DIAGRAMS

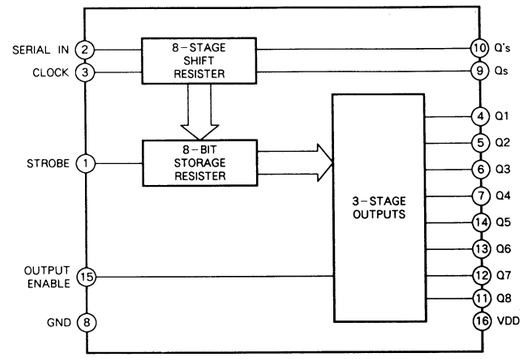
IC1 LA1140



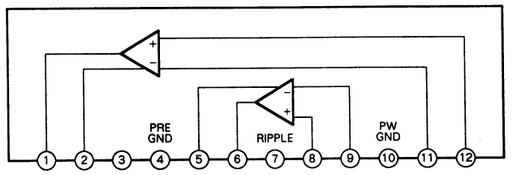
IC4 CX7925B



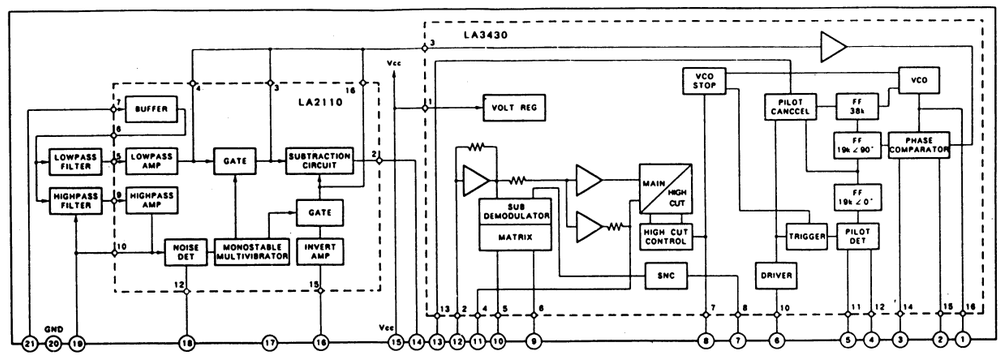
IC5 TC4094BP



IC701, 702 TA7281P



IC2 STK-3400



CDX-R88/R66

Diagram:
e in μF unless otherwise noted. pF: μμF
re not indicated except for electrolytics

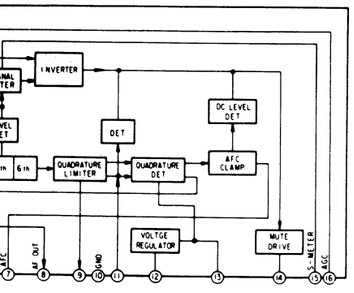
in Ω and ¼ W or less unless otherwise

nt for repair.
gnal path.
gnal path.
H signal path.
H signal path.
14.4 V dc and fed with the regulated dc
m ACC and BACK UP terminals.
with respect to ground unless otherwise

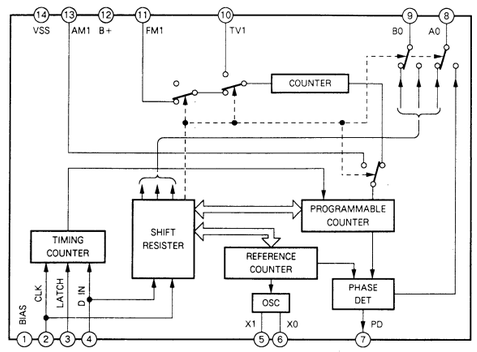
en under no-signal (detuned) conditions
kΩ/V).
ying mode
} detuned
R }
L LED lighting up mode
LED lighting up mode
disc loading in
g disc loading out
s may be noted due to normal produc-

aken to ground in CD playing mode by
.
s may be noted due to normal produc-

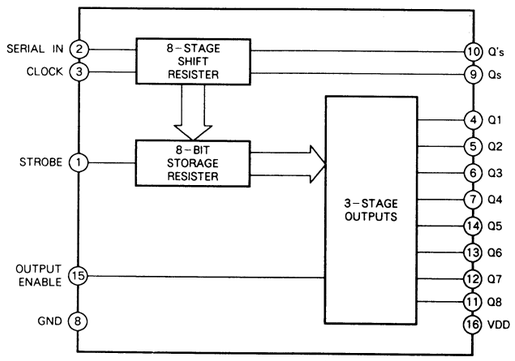
DIAGRAMS



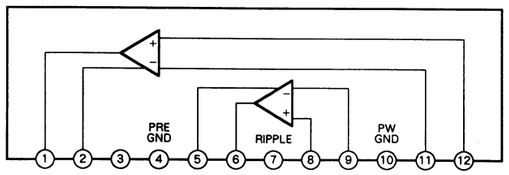
IC4 CX7925B

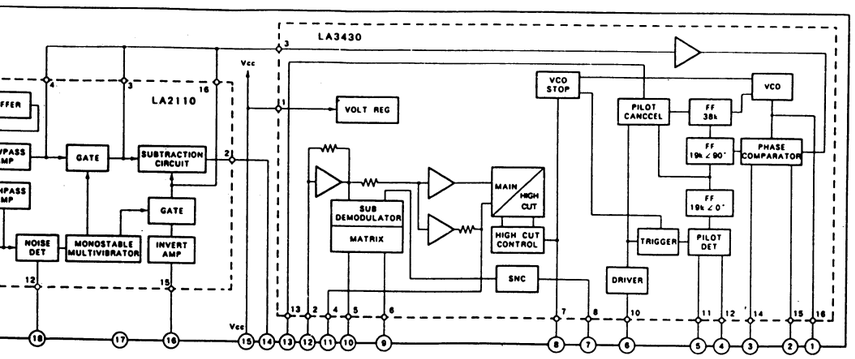


IC5 TC4094BP

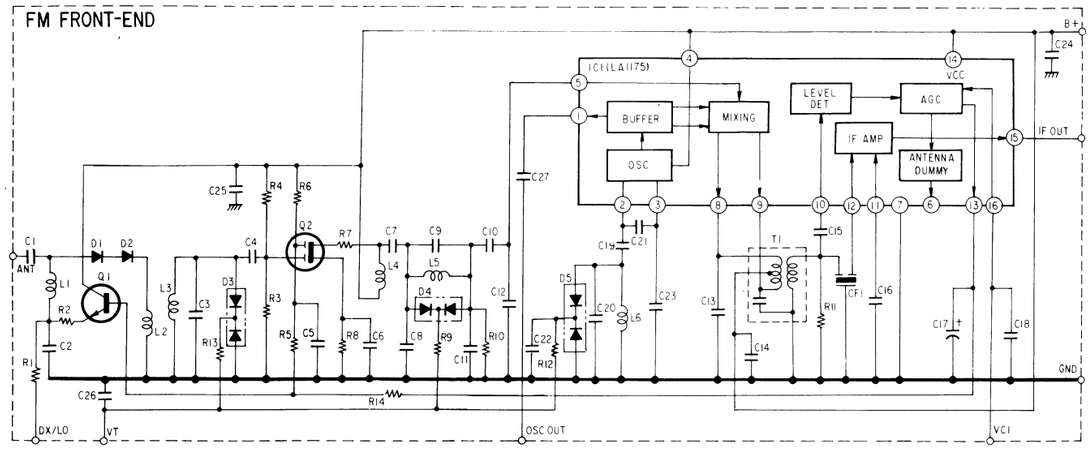


IC701, 702 TA7281P

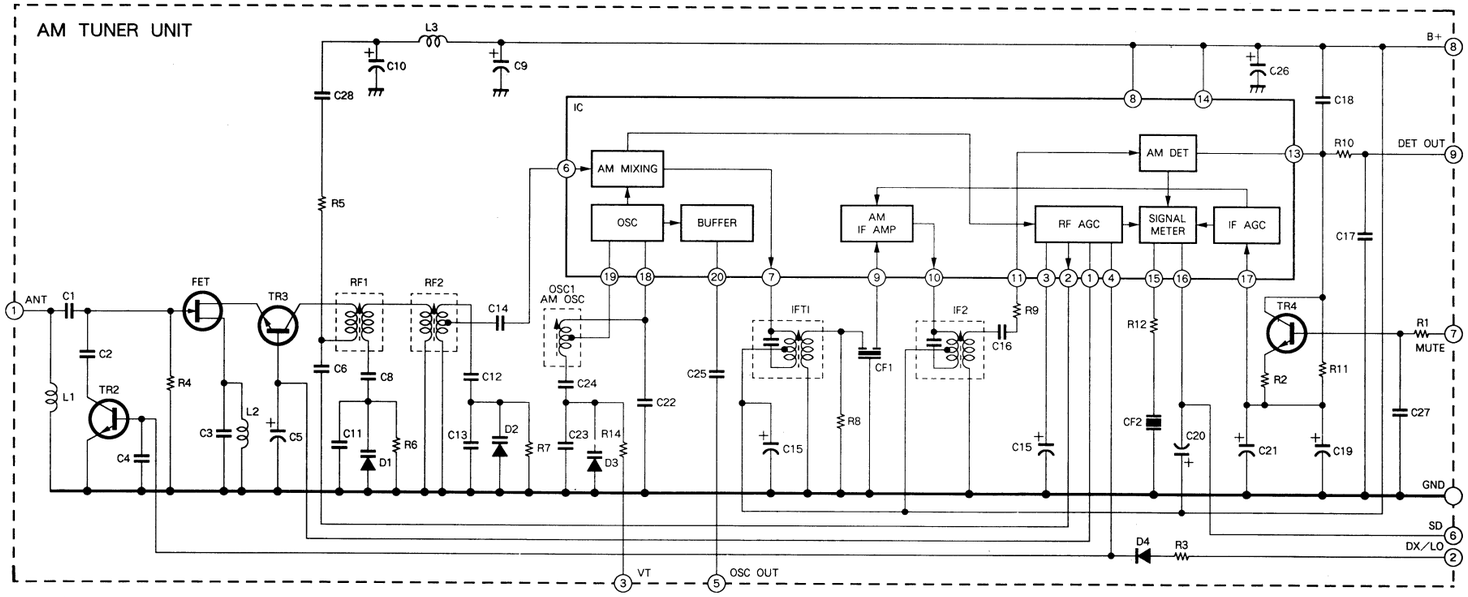




● **FM FRONT-END (FE1)**



● **AM TUNER UNIT**



3-3. MOUNTING DIAGRAM – CD PLAYER SECTION –

– Conductor Side –

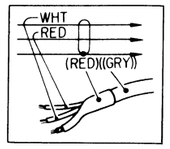
● See page 22 for Semiconductor Lead Layouts.

Note on Schematic Diagram:

- All capacitors are in μF unless otherwise noted. pF: μμF 50WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and ¼ W or less unless otherwise specified.
- ▬▬ : B+ bus.
- ▬ ▬ : B– bus.
- ▭ : adjustment for repair.
- ▬▶▬ : CD signal path.
- ⇨ : tuner signal path.
- Power voltage is 14.4 V dc and fed with the regulated dc power supply from ACC and BACK UP terminals.
- Voltages are dc with respect to ground unless otherwise noted.
- Readings are taken under no-signal (detuned) conditions with a VOM (50 kΩ/V).
  no mark : CD playing mode
  ( ) : FM
  < > : AM } detuned
  (( )) : TUNER
  LOCAL : LOCAL LED lighting up mode
  MONO : MONO LED lighting up mode
  LOAD : during disc loading in
  UNLOAD: during disc loading out
- Voltage variations may be noted due to normal production tolerances.
- Waveforms are taken to ground in CD playing mode by using oscilloscope.
  Voltage variations may be noted due to normal production tolerances.

Note on Mounting Diagram:

- Color code or sleeving over the end of the jacket.

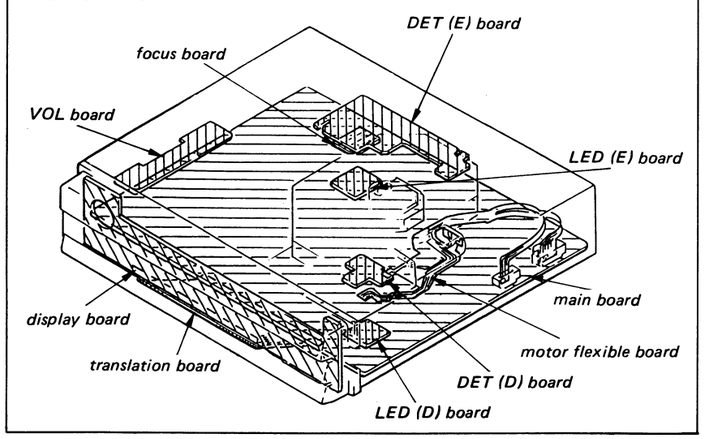


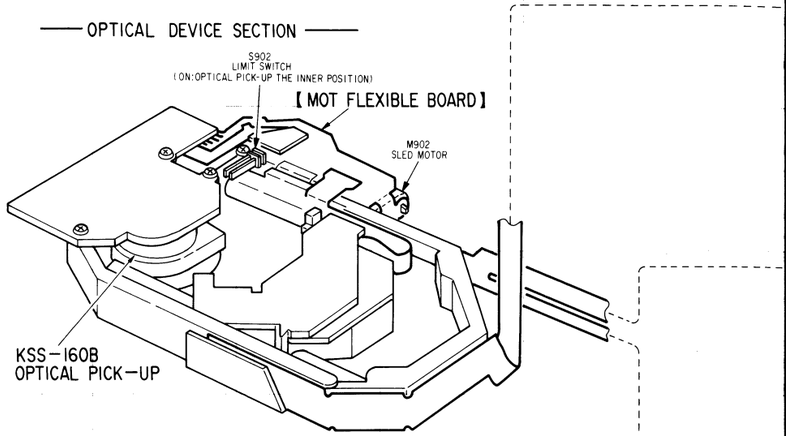
- ○— : parts extracted from the component side.
- ●— : parts extracted from the conductor side.
- ■ : part mounted on the conductor side.
- ⊗ : Through hole.
- * : Component side pattern

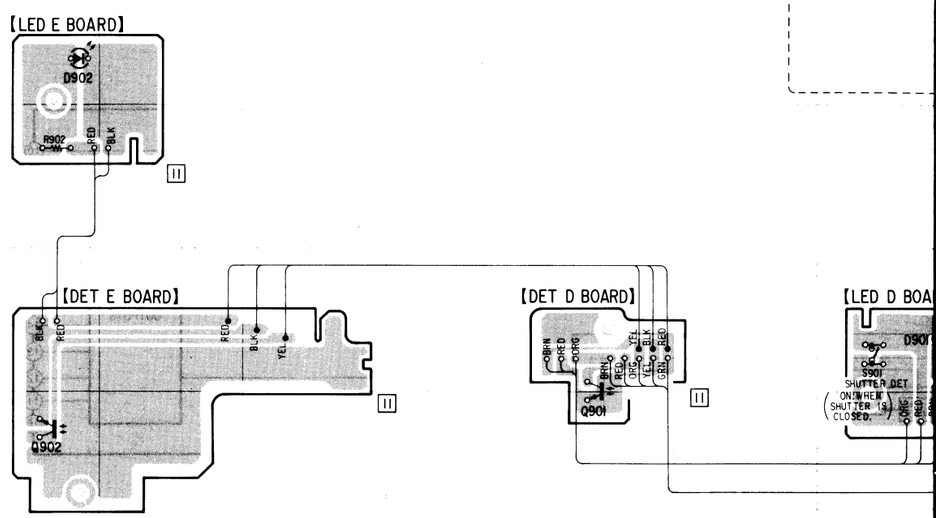
● SEMICONDUCTOR LOCATION

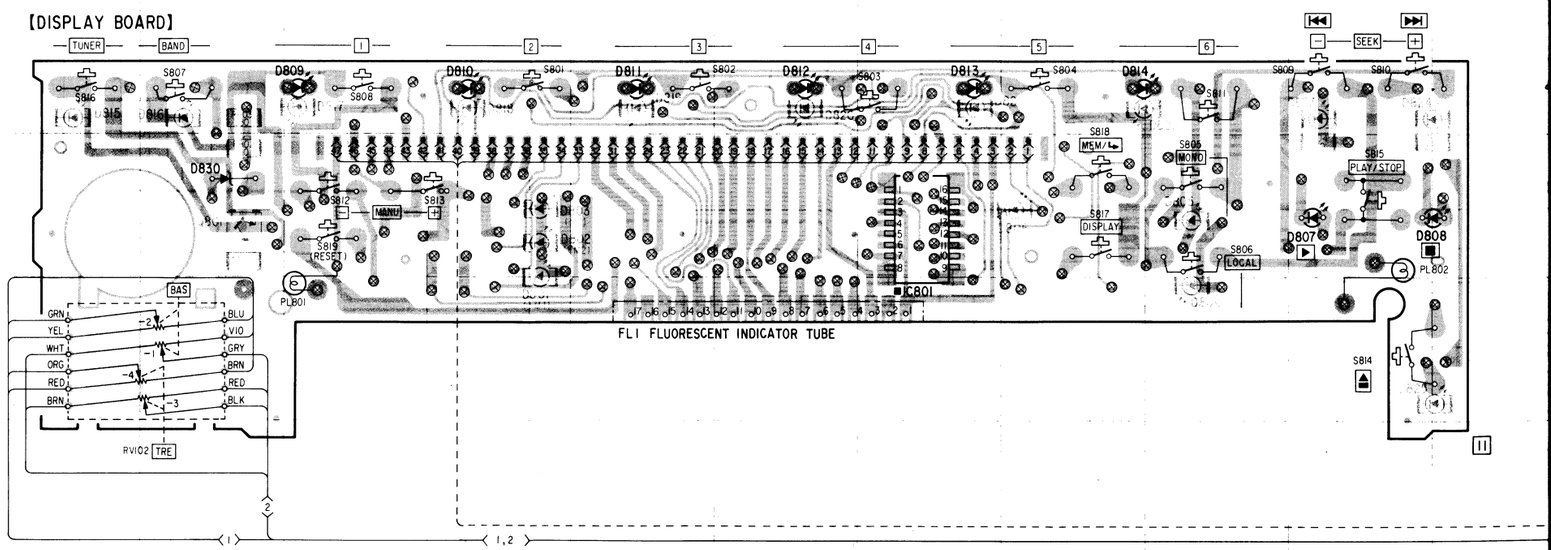
Ref. No.	Location	Ref. No.	Location	Ref. No.	Location
D502	H-17	IC101	E-22	Q516	H-20
D503	J-16	IC102	G-21	Q517	H-19
D504	I-19	IC201	D-23	Q518	I-14
D505	H-14	IC202	G-22	Q519	I-15
D506	I-14	IC301	C-20	Q520	H-14
D507	J-14	IC302	D-22	Q522	E-23
D508		IC303	F-21	Q523	H-20
D509	G-19	IC304	I-21	Q524	I-20
D510	I-14	IC501	D-15	Q525	H-20
D801	I-4	IC502	F-15	Q526	I-20
D802	I-4	IC503	E-19	Q528	I-21
D803	I-4	IC504	F-14	Q529	I-21
D804	J-9	IC505	F-17	Q530	H-21
D805	I-9	IC506	H-16	Q531	I-21
D806	I-8	IC507	F-20	Q532	H-21
D807	I-10	IC508	I-17	Q533	J-15
D808	I-10	IC509	I-18	Q534	I-15
D809	H-3	IC510	H-18	Q536	G-19
D810	H-4	IC512	I-20	Q537	G-19
D811	H-5	IC513	G-20	Q538	G-19
D812	H-6	IC514	H-14	Q539	G-19
D813	H-7	IC515	I-14	Q540	E-17
D814	H-8	IC516	I-21	Q541	E-17
D815	H-1	IC801	I-7	Q801	I-2
D816	H-2			Q901	A-18 (FOCUS PC BOARD)
D817	H-3	Q501	G-13	Q901	F-9 (DET(D) BOARD)
D818	H-4	Q502	G-14		
D819	H-5	Q503	G-13		
D820	H-6	Q504	G-14	Q902	A-17 (FOCUS PC BOARD)
D821	H-7	Q505	E-17		
D822	H-9	Q506	C-16	Q902	G-5 (DET(E) BOARD)
D823	H-10	Q507	F-17		
D824	H-10	Q508	I-15		
D825	J-10	Q509	I-15		
D830	I-2	Q510	E-17		
D901	B-18 (FOCUS PC BOARD)	Q511	E-16		
		Q512	I-19		
D901	F-11 (LED(D) BOARD)	Q513	I-19		
		Q514	G-18		
D902	D-5	Q515	G-18		

● CIRCUIT BOARDS LOCATION



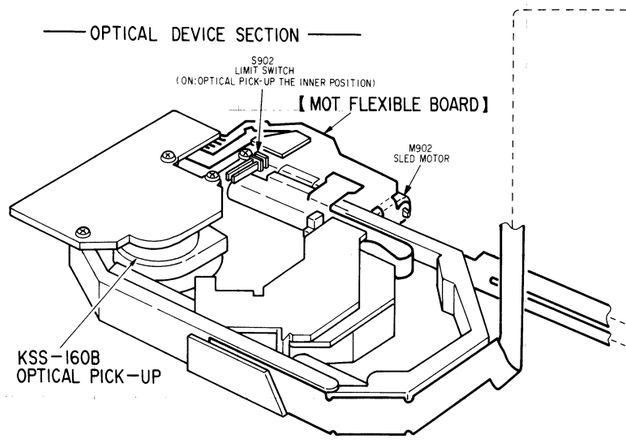


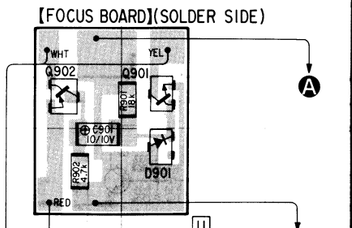


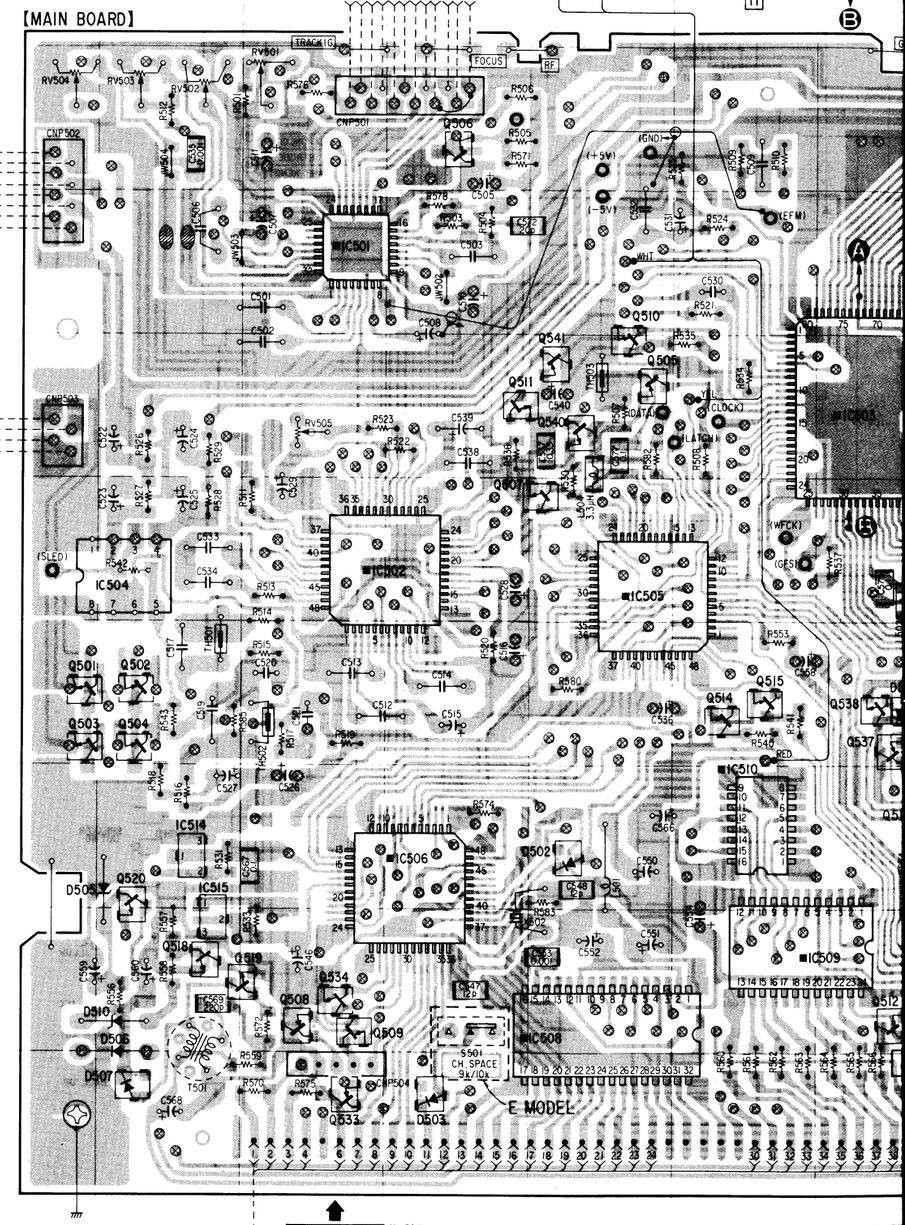


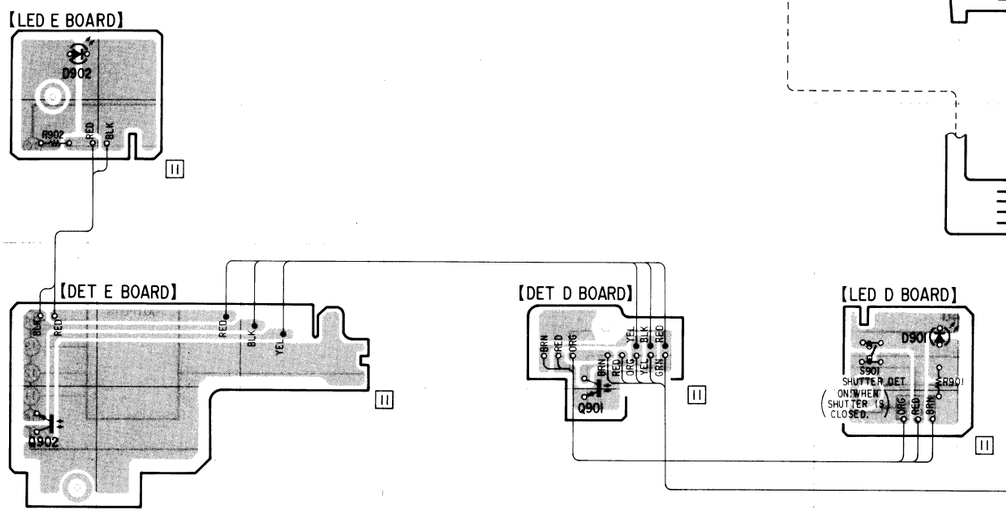
CONDUCTOR LOCATION

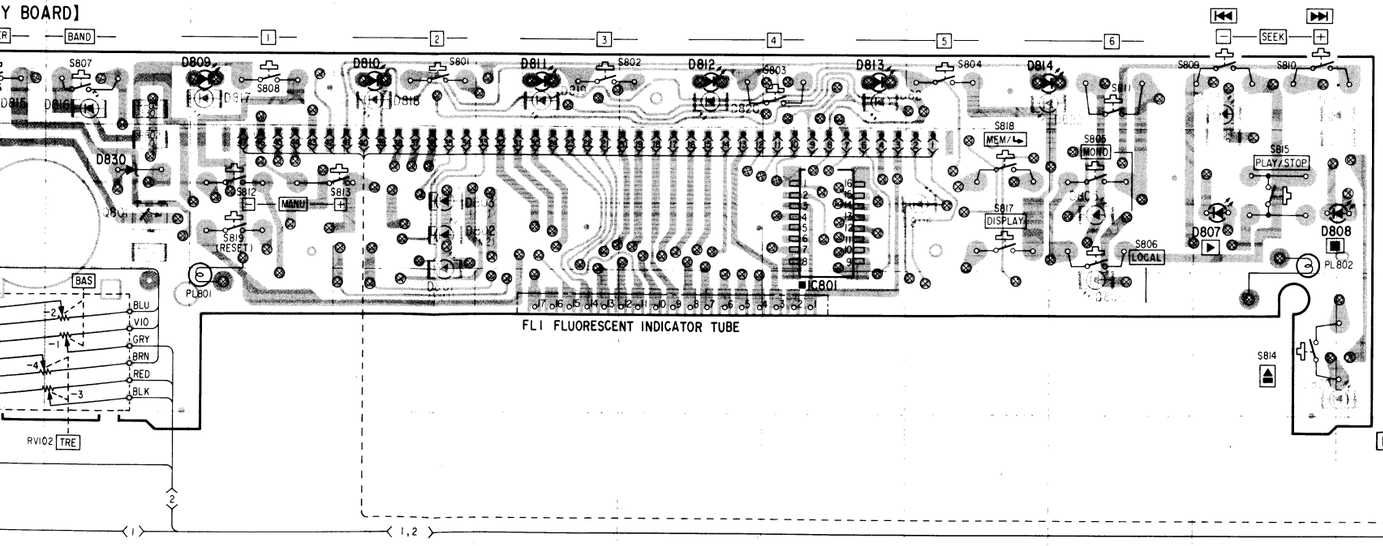
Location	Ref. No.	Location	Ref. No.	Location
H-17	IC101	E-22	Q516	H-20
J-16	IC102	G-21	Q517	H-19
I-19	IC201	D-23	Q518	I-14
H-14	IC202	G-22	Q519	I-15
I-14	IC301	C-20	Q520	H-14
J-14	IC302	D-22	Q522	E-23
	IC303	F-21	Q523	H-20
G-19	IC304	I-21	Q524	I-20
I-14	IC501	D-15	Q525	H-20
I-4	IC502	F-15	Q526	I-20
I-4	IC503	E-19	Q528	I-21
I-4	IC504	F-14	Q529	I-21
J-9	IC505	F-17	Q530	H-21
I-9	IC506	H-16	Q531	I-21
I-8	IC507	F-20	Q532	H-21
I-10	IC508	I-17	Q533	J-15
I-10	IC509	I-18	Q534	I-15
H-3	IC510	H-18	Q536	G-19
H-4	IC512	I-20	Q537	G-19
H-5	IC513	G-20	Q538	G-19
H-6	IC514	H-14	Q539	G-19
H-7	IC515	I-14	Q540	E-17
H-8	IC516	I-21	Q541	E-17
H-1	IC801	I-7	Q801	I-2
H-2			Q901	A-18 (FOCUS PC BOARD)
H-3	Q501	G-13		
H-4	Q502	G-14	Q901	F-9 (DET(D) BOARD)
H-5	Q503	G-13		
H-6	Q504	G-14	Q902	A-17 (FOCUS PC BOARD)
H-7	Q505	E-17		
H-9	Q506	C-16	Q902	G-5 (DET(E) BOARD)
H-10	Q507	F-17		
H-10	Q508	I-15		
J-10	Q509	I-15		
I-2	Q510	E-17		
B-18 (FOCUS PC BOARD)	Q511	E-16		
F-11 (LED(D) BOARD)	Q512	I-19		
	Q513	I-19		
D-5	Q514	G-18		
	Q515	G-18		

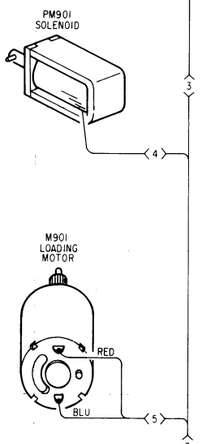












【FOCUS BOARD】(SOLDER SIDE)

【MAIN BOARD】

【VOL BOARD】

PIN NO.	FUNCTION	PIN NO.	FUNCTION
A11		B11	
A10	SD	B10	TUNER SIG(L)
A9	STEREO	B9	
A8	CHECK	B8	TUNER SIG(R)
A7	CLK	B7	GND
A6	DATA	B6	LOCK/UNLOCK
A5	STROBE	B5	AMP REM OUT
A4	−5V	B4	ACC
A3	+5V	B3	ILLUM.
A2	+30V	B2	BACK UP
A1	POWER SW ON/OFF	B1	TUNER MODE

SLED MOTOR ⊕
SLED MOTOR ⊖
−5V
+5V
SPINDLE DRIVE
SPINDLE GND
SLED LIMIT
GND

FOCUS ⊕
TRACKING ⊕
TRACKING ⊖
FOCUS ⊖

PM901 SOLENOID

M901 LOADING MOTOR

E MODEL

CNJ504 GRN YEL ORG RED BRN
CNJ505 BLU RED
CNJ506 RED RED

CNJ513 10 RED 9 YEL 8 BRN 7 WHT 6 BLK 5 PNK 4 GRN 3 ORG 2 BLU 1 ORG
CNJ507 7 6 BLU 5 WHT 4 BRN 3 YEL 2 RED 1 ORG
CNJ510 3 WHT 2 RED 1

CNJ512 4 WHT (WHT) 3 WHT 2 RED (RED) 1
CNJ511 4 BLU 3 2 RED 1 WHT
CNJ508 8 7 6 5 4 3 GRY 2 GRY 1 WHT
CNJ509 9 8 7 6 5 WHT 4 RED 3 2 1

L-CH (WHT) AUX INPUT
R-CH (RED)
AMP REM OUT
R-CH (RED) LINE OUTPUT (FRONT)
L-CH (WHT)
REM OUT
REM IN
POWER SW
R-CH (RED) L-CH (REAR) LINE OUTPUT (WHT)

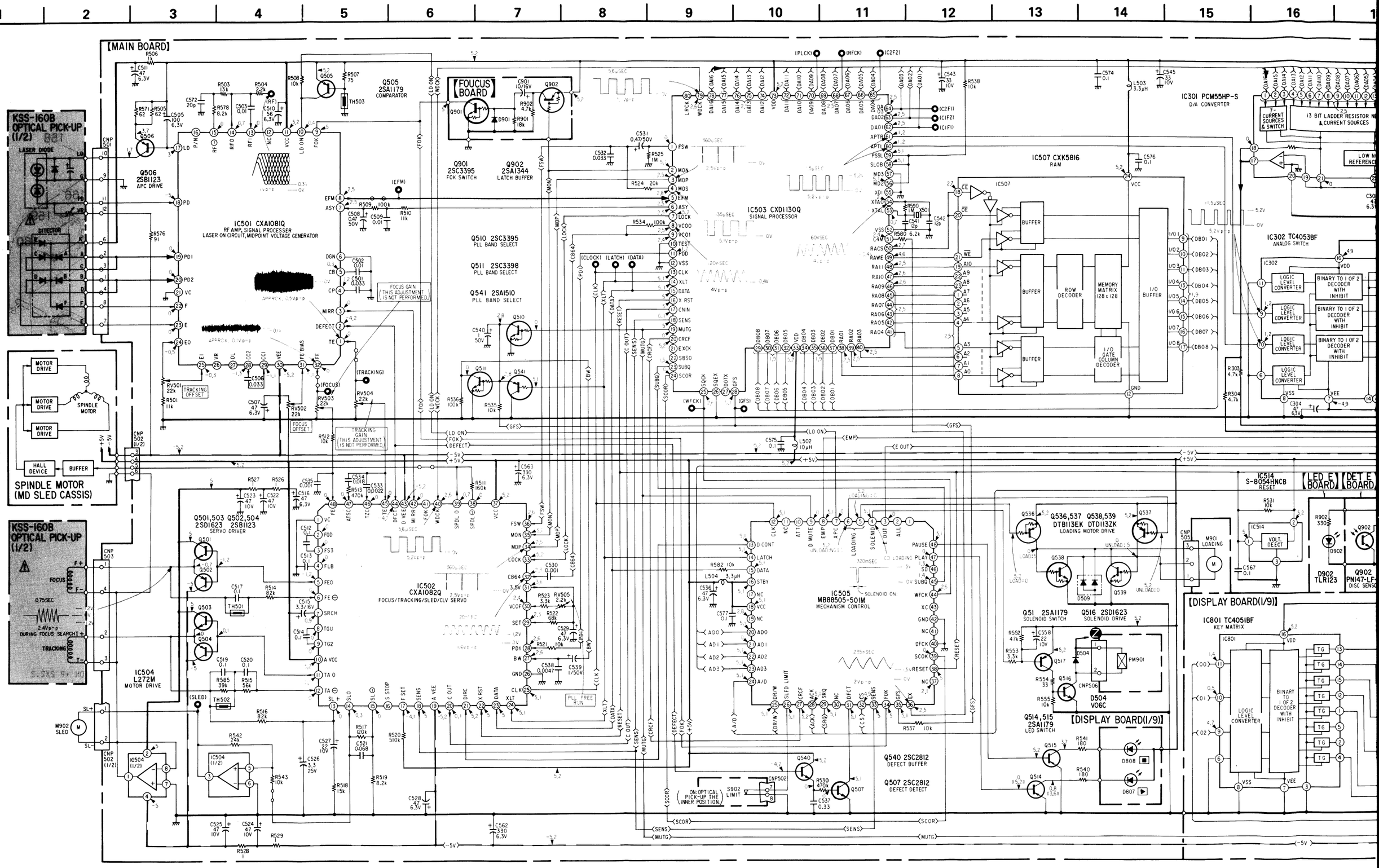
CNJ514 1 BRN 2 RED 3 ORG 4 YEL 5 GRN 6 BLU 7 VIO 8 GRY 9 WHT 10 BLK 11 BRN 12 RED

CNJ101 YEL ORG RED VIO BLK WHT GRY
CNJ102 1 BRN 2 RED 3 4 ORG 5 YEL 6 GRN 7 BLU 8 VIO

CNP101 CNP102 SI01 (POWER) RV101-1 RV101-2 RV101-3 RV101-4 RV101-5

RV101-4,5 FADER
RV101-1,2 VOL
RV101-3 PULL BAL

• See page 30 for notes.



CDX-R88/R66

10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25

IC304 μPC4560G2
TONE AMP

IC202 M5203FP
AMP

【VOL BOARD(1/4)】

IC201 M5203FP
AMP

IC303 TC4053BF
ANALOG SWITCH

IC302 TC4053BF
ANALOG SWITCH

IC301 PCM55HP-S
D/A CONVERTER

IC507 CXK5816
RAM

IC503 CXD1130Q
SIGNAL PROCESSOR

IC505
MB88505-501M
MECHANISM CONTROL

IC101
M5203FP
AMP

IC102 M503FP
AMP

IC304 μPC4560G2
TONE AMP

IC506
MB88505-503M(US,CANADIAN MODEL)
-538M(E MODEL)
-540M(AEP MODEL)
SYSTEM CONTROL

IC509 μPD82C43G
PORT EXPANDER

IC510
LC74HC365M
3 STATE BUFFER

IC514
S-8054HNCB
RESET

IC515
S-8054HNCB
RESET

IC801 TC4051BF
KEY MATRIX

【DISPLAY BOARD(I/9)】

【LED E BOARD】 【DET E BOARD】 【LED D BOARD】 【DET D BOARD】

Q536,537 Q538,539
DTB113EK DTD113ZK
LOADING MOTOR DRIVE

Q51 2SA1179
SOLENOID SWITCH

Q516 2SD1623
SOLENOID DRIVE

Q514,515
2SA1179
LED SWITCH

Q540 2SC2812
DEFECT BUFFER

Q507 2SC2812
DEFECT DETECT

Q508,509
2SA1363
SENSOR BUFFER

Q512,513
2SA1179
LED SWITCH

Q522
2SC3395
CD/AUX SELECT

D902
TLR123

D901
TLR123

D504
V06C

D502
DSC010

D503
1SS133

D809-814
BR4868K

D815-825
LN1451C

19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34

A B C D E F G H I J

IC201 M5203FP AMP

IC202 M5203FP AMP

IC303 TC4053BF ANALOG SWITCH

IC101 M5203FP AMP

IC102 M503FP AMP

IC304 μPC4560G2 TONE AMP

【VOL BOARD(1/4)】

【DISPLAY BOARD(1/9)】

【DISPLAY BOARD(1/9)】

【VOL BOARD(1/4)】

【DISPLAY BOARD(1/9)】

【VOL BOARD(1/4)】

【DISPLAY BOARD(1/9)】

FLI FLUORESCENT INDICATOR TUBE

IC508 M54940 FLUORESCENT DRIVE/DECODER

Q533 DTA144WK COLON SWITCH

Q534 2SC3398

Q522 2SC3395 CD/AUX SELECT

Q528, 529 2SC3398 RELAY DRIVE

IC516 S-8054HNCB MUTE COMPARATOR

IC506 MB88505-503M(US,CANADIAN MODEL) -538M(E MODEL) -540M(AEP MODEL) SYSTEM CONTROL

IC515 S-8054HNCB RESET

IC509 μPD82C43G PORT EXPANDER

IC510 LC74HC365M 3 STATE BUFFER

IC512 MB88201 I/O CONTROL

IC513 LC74HC04M BUFFER

Q512,513 2SA1179 LED SWITCH

Q520 2SC2812 VOLT. REG.

Q518,519 2SC2812 D/D CONVERTER SWITCH

Q525 DTB123YK REMOTE BUFFER

Q526 2SC2812 REMOTE SWITCH

Q523 DTB123YK REMOTE BUFFER

Q524 2SC3398 REMOTE SWITCH

Q530 2SC3398 REMOTE SWITCH

Q531 2SC3398 REMOTE SWITCH

Q532 2SC3398 REMOTE SWITCH

D809–814 BR4868K D801–805 LN1451 D806 LN1261

D815–825 LN1451C D830 RD10ESB2 Q801 2SD1623 VOLT. REG.

D502 DSC010 D507 DSC010 D508 DCA015 D505 RD5.6EB3 D510 RD7.5ES

IC1C MB8820I I/O CONTROL

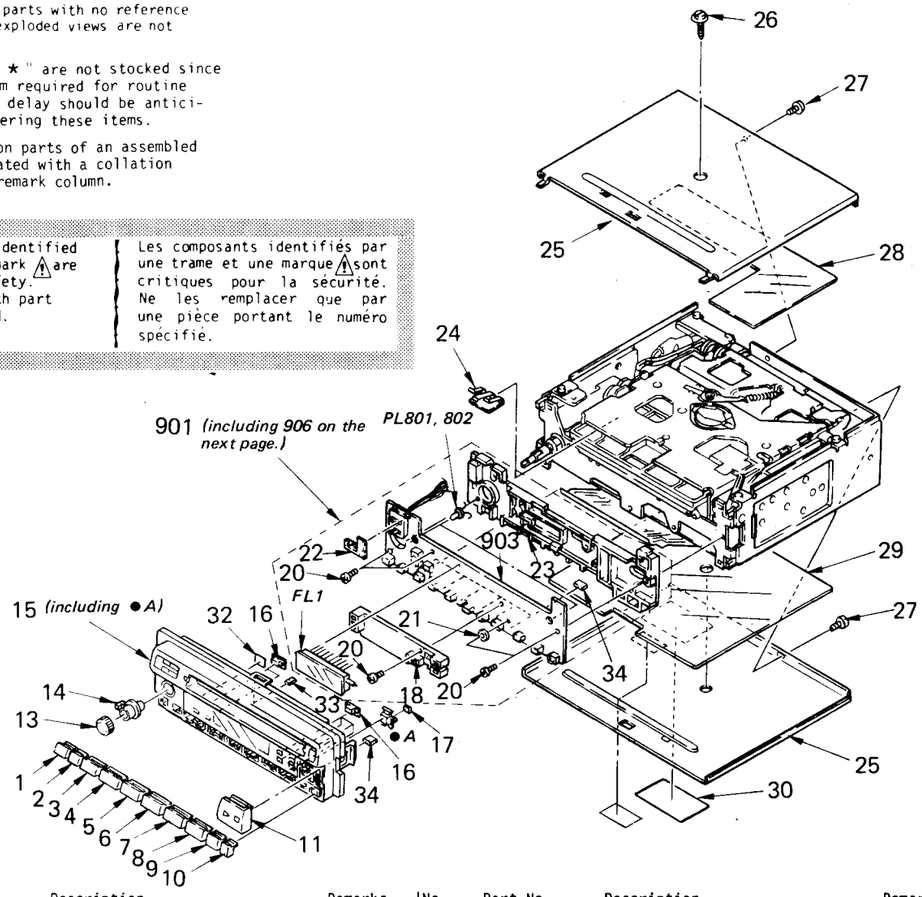
CDX-R88/R66 CDX-R88/R66

SECTION 4
EXPLODED VIEWS AND PARTS LIST

NOTE:
- The mechanical parts with no reference number in the exploded views are not supplied.
- Items marked " ★ " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- The construction parts of an assembled part are indicated with a collation number on the remark column.

The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.	Les composants identifiés par une trame et une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

(1)



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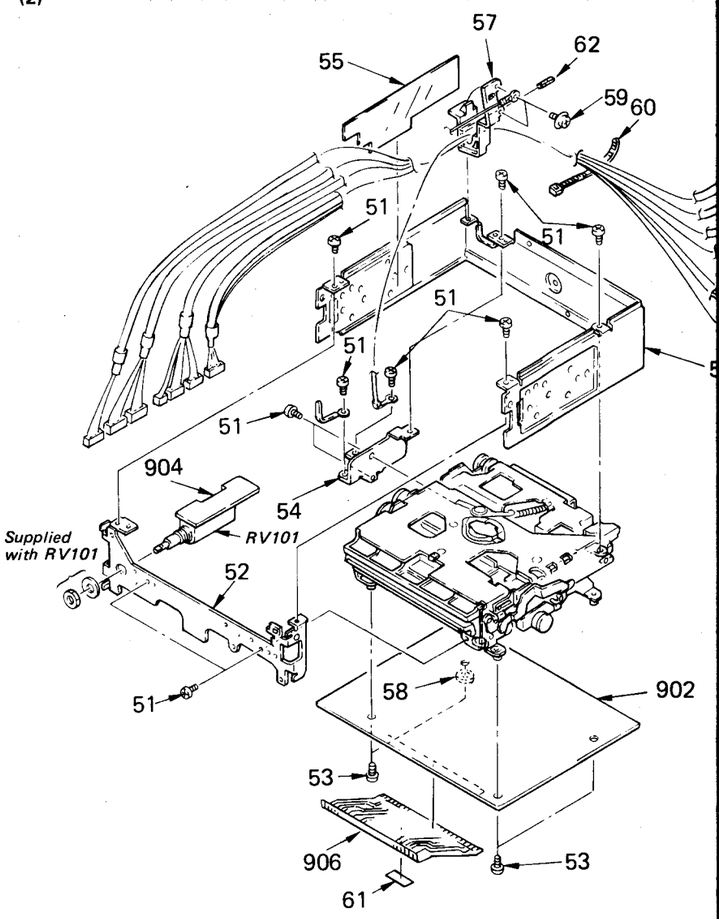


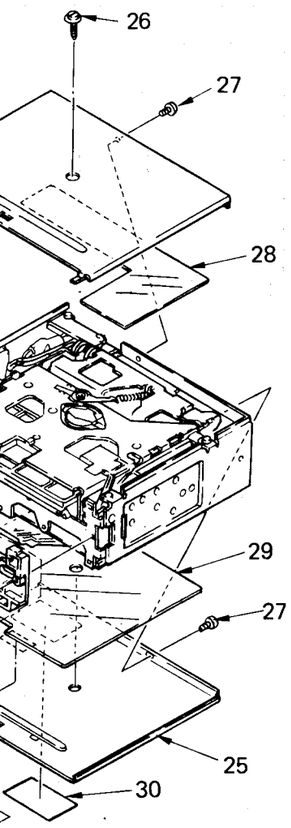
No.	Part No.	Description	Remarks
1	3-339-421-01	(R88)...BUTTON, TUNER	
	3-339-421-11	(R66)...BUTTON, TUNER	
2	3-339-420-11	(R88)...BUTTON, AMS (D)/BAND	
	3-339-421-31	(R66)...BUTTON, AMS (D)/BAND	
3	3-339-418-01	(R88)...BUTTON, PRESET 1	
	3-339-473-01	(R66)...BUTTON, PRESET 1	
4	3-339-418-11	(R88)...BUTTON, PRESET 2	
	3-339-473-11	(R66)...BUTTON, PRESET 2	
5	3-339-418-21	(R88)...BUTTON, PRESET 3	
	3-339-473-21	(R66)...BUTTON, PRESET 3	
6	3-339-418-31	(R88)...BUTTON, PRESET 4	
	3-339-473-31	(R66) ..BUTTON, PRESET 4	
7	3-339-418-41	(R88)...BUTTON, PRESET 5	
	3-339-473-41	(R66)...BUTTON, PRESET 5	
8	3-339-418-51	(R88)...BUTTON, PRESET 6	
	3-339-473-51	(R66)...BUTTON, PRESET 6	
9	3-339-420-01	(R88)...BUTTON, AMS (D)/BAND	
	3-339-420-21	(R66)...BUTTON, AMS (D)/BAND	
10	3-339-419-01	(R88)...BUTTON, AMS	
	3-339-419-11	(R66)...BUTTON, AMS	
11	3-339-436-01	(R88)...BUTTON, PLAY	
	3-339-436-11	(R66)...BUTTON, PLAY	
13	X-3339-402-1	KNOB ASSY, VOL	
14	3-339-401-01	KNOB, FADER	
15	X-3339-404-1	(R88)...PIECE ASSY, NOSE	
	X-3339-403-1	(R66)...PIECE ASSY, NOSE	
16	3-339-405-01	BUTTON (A)	
17	9-911-844-XX	SPACER (B)	

No.	Part No.	Description	Remarks
18	3-339-433-01	HOLDER, FL TUBE	
20	7-621-255-65	SCREW +P 2X10	
21	7-623-952-11	WASHER 2.0, FIBER	
22	*3-339-449-01	CLOTH, HOLE MASK	
23	3-339-439-01	HOLDER, PC BOARD	
24	3-339-450-01	SPRING	
25	*3-339-425-01	LID	
26	3-339-408-01	SCREW, TRANSPORT	
27	7-685-790-04	SCREW +PTT 2.6X4 (S)	
28	*3-339-458-01	SHEET, INSULATING, MD	
29	*3-339-407-01	SHEET, INSULATING	
30	3-339-412-01	(R88:US).....LABEL, MODEL NUMBER (U)	
	3-339-413-01	(Canadian)...LABEL, MODEL NUMBER (CA)	
	3-339-482-01	(E).....LABEL, MODEL NUMBER (E)	
	3-339-481-01	(AEP).....LABEL, MODEL NUMBER (AE)	
	*3-339-470-01	(R66).....LABEL, MODEL NUMBER	
32	*3-339-463-01	SHEET, BARREL	
33	9-911-863-XX	SPACER (A)	
34	*3-339-467-01	CUSHION	
35	*4-885-838-00	(AEP).....LABEL, CLASS 1	
901	*A-3216-149-A	INDICATION BLOCK ASSY	906
903	A-3279-659-A	MOUNTED PCB, INDICATION	
FL1	1-519-324-21	INDICATOR TUBE, FLUORESCENT	

No.	Part No.	Description	Remarks
51	7-685-790-04	SCREW +PTT 2.6X4 (S)	
52	*3-339-422-01	BRACKET (A)	
53	7-621-770-87	SCREW +B 2.6X5	
54	*3-339-406-01	BRACKET (B)	
55	*3-327-122-01	PANEL, BLIND	
56	*3-339-435-01	CHASSIS	
57	3-339-431-01	CLAMP, CORD	
58	7-688-003-03	WASHER, 3	
59	7-621-759-65	+PSW, 2.6X8	
60	3-701-748-00	CLAMP	
61	*3-330-948-01	SPACER (DISK GUIDE)	
62	9-911-841-XX	CUSHION	
63	3-339-410-01	COVER, PIN JACK	

No.	Part No.
902	A-3260-5
	A-3260-5
	A-3260-5
904	*1-621-66
906	1-621-94
907	1-559-04
908	1-559-05
909	1-559-05
910	1-559-05
911	1-559-05
912	1-559-25
RV101	1-237-56

LIST



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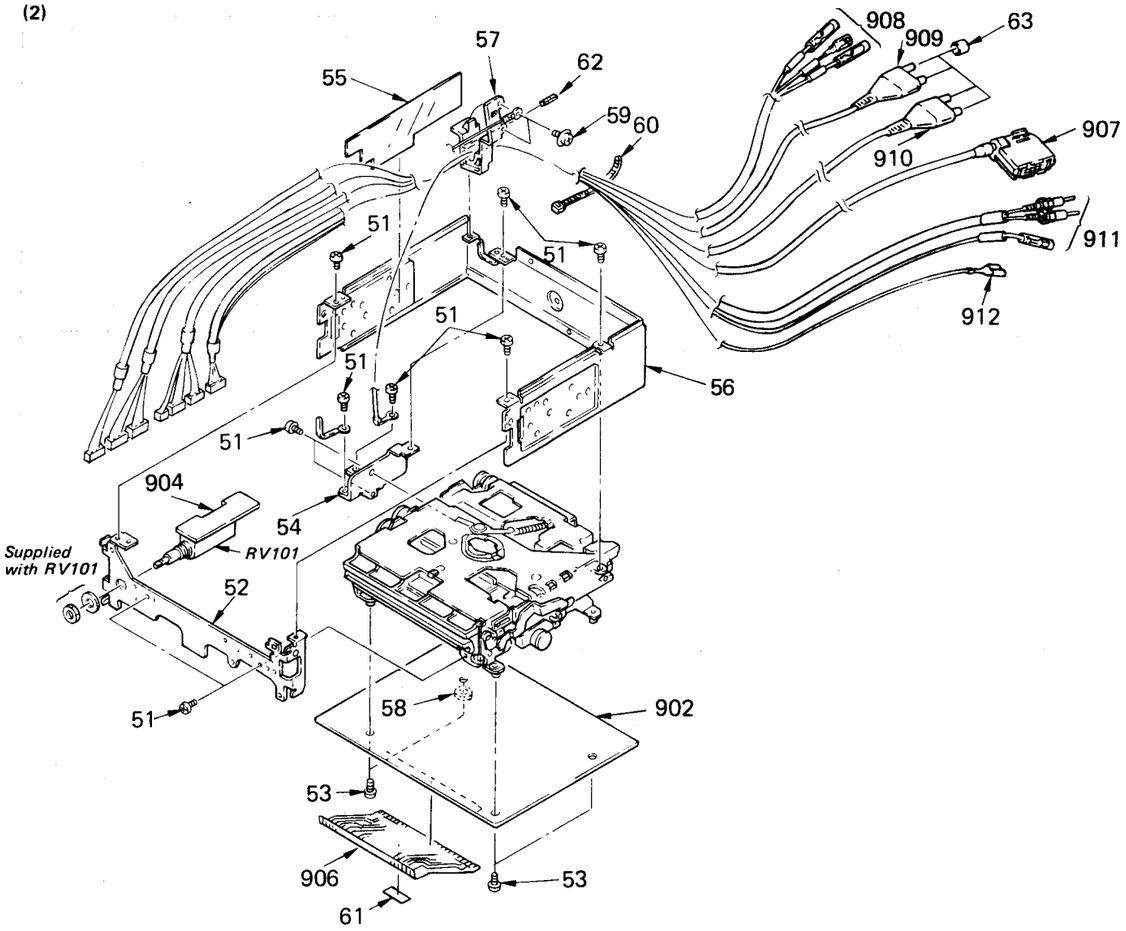

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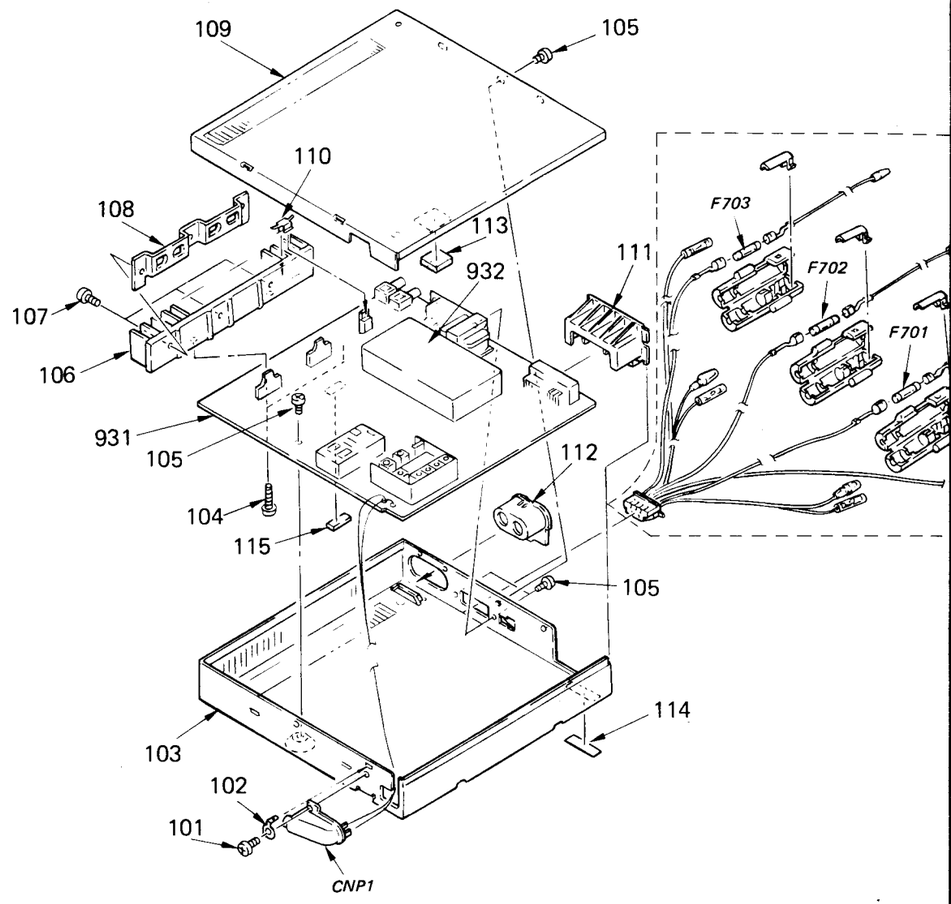


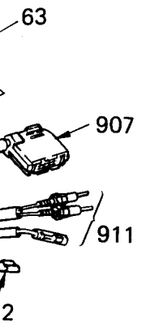
Description	Remarks
DER, FL TUBE	
EW +P 2X10	
HER 2.0, FIBER	
TH, HOLE MASK	
DER, PC BOARD	
ING	
EW, TRANSPORT	
EW +PTT 2.6X4 (S)	
ET, INSULATING, MD	
ET, INSULATING	
3:US).....LABEL, MODEL NUMBER (U)	
nadian)...LABEL, MODEL NUMBER (CA)	
.....LABEL, MODEL NUMBER (E)	
P).....LABEL, MODEL NUMBER (AE)	
5).....LABEL, MODEL NUMBER	
ET. BARREL	
CER (A)	
HION	
P).....LABEL, CLASS 1	
ICATION BLOCK ASSY	906
NTED PCB, INDICATION	
ICATOR TUBE, FLUORESCENT	

No.	Part No.	Description	Remarks
51	7-685-790-04	SCREW +PTT 2.6X4 (S)	
52	*3-339-422-01	BRACKET (A)	
53	7-621-770-87	SCREW +B 2.6X5	
54	*3-339-406-01	BRACKET (B)	
55	*3-327-122-01	PANEL, BLIND	
56	*3-339-435-01	CHASSIS	
57	3-339-431-01	CLAMP, CORD	
58	7-688-003-03	WASHER, 3	
59	7-621-759-65	+PSW, 2.6X8	
60	3-701-748-00	CLAMP	
61	*3-330-948-01	SPACER (DISK GUIDE)	
62	9-911-841-XX	CUSHION	
63	3-339-410-01	COVER, PIN JACK	

No.	Part No.	Description	Remarks
902	A-3260-537-A	(US,Canadian)...MOUNTED PCB, MAIN	
	A-3260-570-A	(E).....MOUNTED PCB, MAIN	
	A-3260-576-A	(AEP).....MOUNTED PCB, MAIN	
904	*1-621-684-11	PC BOARD, VOL	
906	1-621-946-11	PC BOARD, TRANSLATION	
907	1-559-086-11	CORD (WITH CONNECTOR)	
908	1-559-091-11	CORD (WITH TERMINAL)	
909	1-559-092-11	CORD (WITH JACK)	
910	1-559-093-11	CORD (WITH JACK)	
911	1-559-095-11	CORD (WITH PLUG)	
912	1-559-235-11	CORD (WITH TERMINAL)	
RV101	1-237-586-11	RES, VAR, CARBON 20KX2/50K/100KX2 (VOL/BAL/FADER)	

No.	Part No.	Description	Remarks
101	7-685-790-04	SCREW +PTT 2.6X4 (S)	
102	7-623-508-01	LUG, 3	
103	*3-339-437-01	CASE (LOWER), H.A	
104	7-682-148-15	SCREW +P 3X8	
105	7-685-751-04	SCREW +PTT 3X6 (S)	
106	*3-339-423-01	HEAT SINK	
107	7-685-752-01	SCREW +PTT 3X8 (S)	
108	*3-339-415-01	BRACKET, IC	
109	*3-339-438-01	CASE (UPPER), H.A	
110	*3-339-414-01	RETAINER, TRANSISTOR	
111	3-339-424-01	COVER, CONNECTOR	

No.	Part No.	Description
112	*3-326-001-01	COVER, JACK
113	*3-339-466-01	SPACER (HA)
114	3-703-264-11	LABEL (B), SERIAL NO
115	9-911-841-XX	CUSHION
931	*A-3260-535-A	MOUNTED PCB, HIDE-AWAY
932	1-464-767-11	CONVERTER UNIT, DC-DC
933	1-559-123-11	CORD (WITH CONNECTOR)
CNP1	*1-563-162-11	SOCKET, CONNECTOR (ANTEN
F701	1-532-422-00	FUSE, 6.3A
F702	1-532-360-XX	FUSE, 1A
F703	1-532-360-XX	FUSE, 1A



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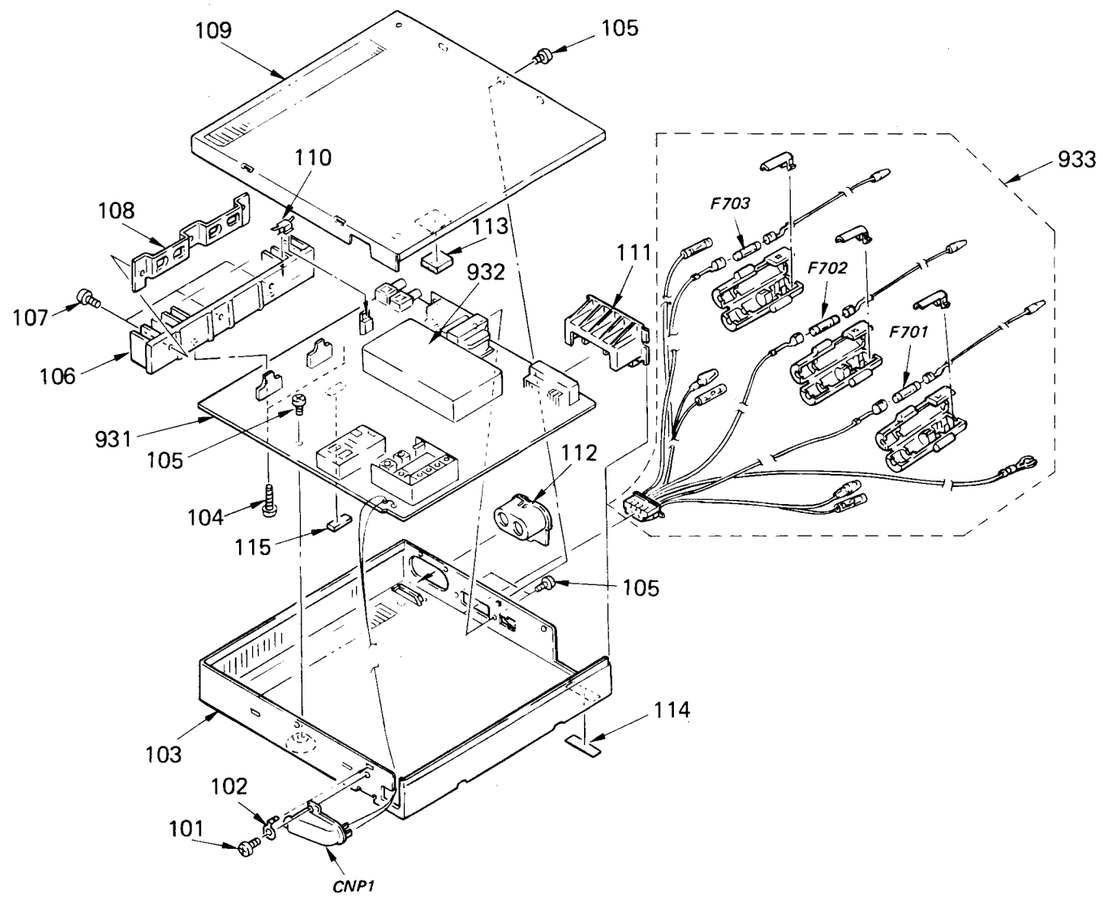

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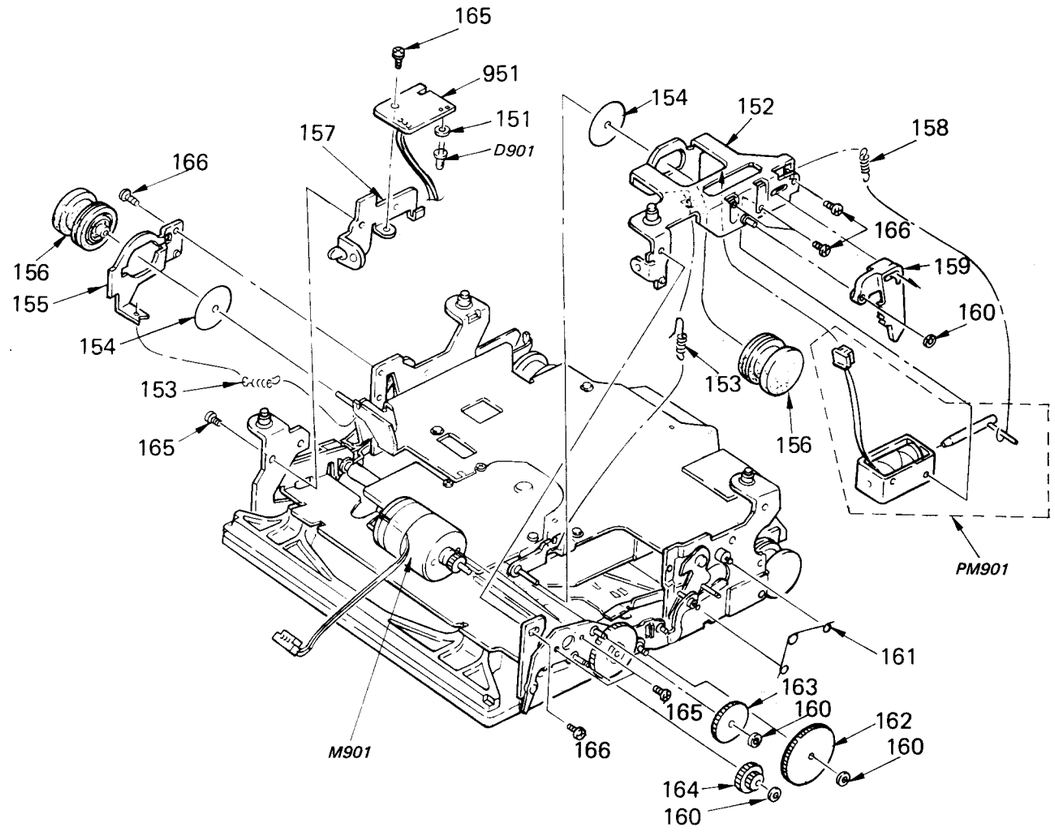


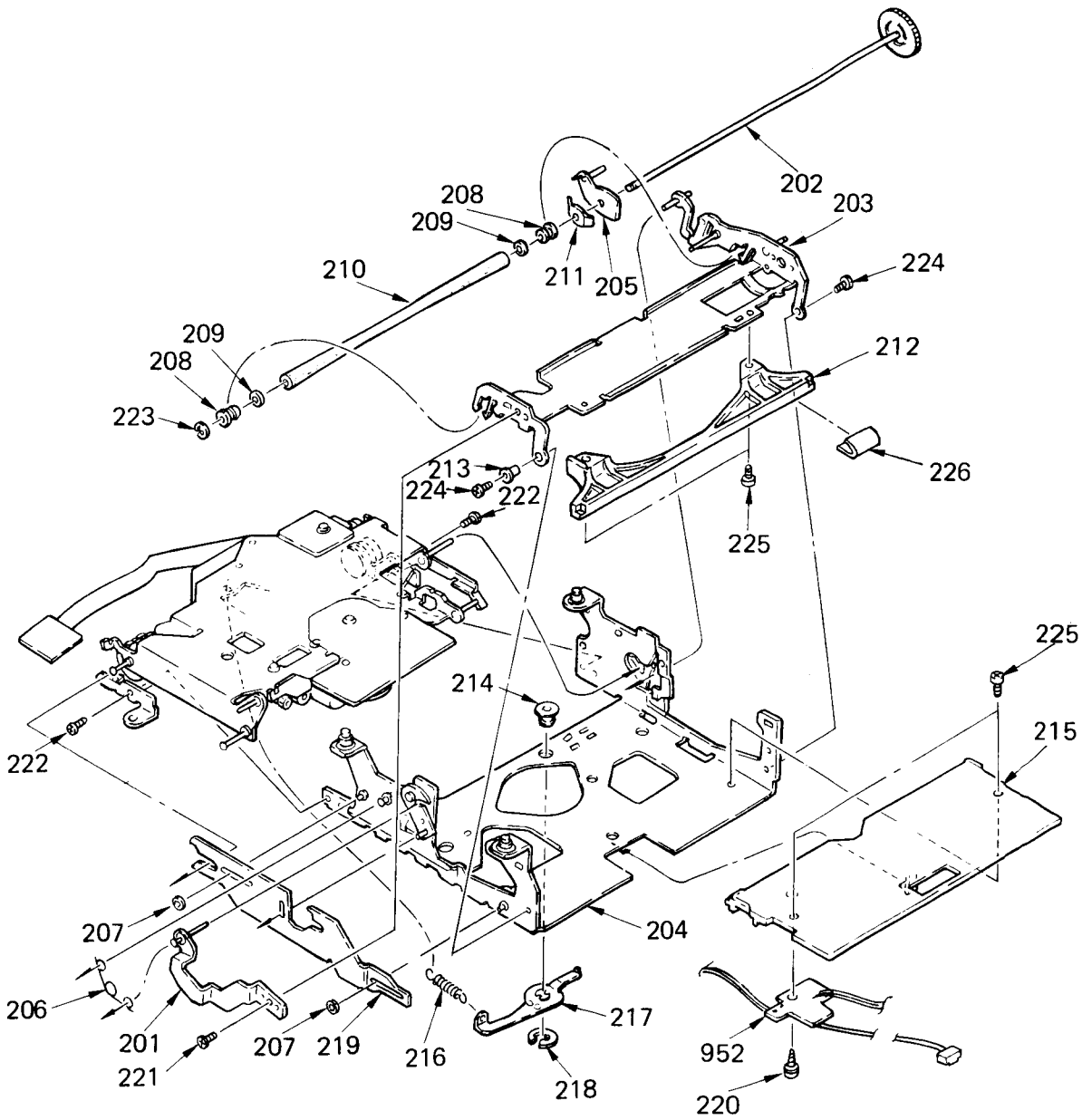
Remarks
CB, MAIN
CB, MAIN
CB, MAIN

No.	Part No.	Description	Remarks
101	7-685-790-04	SCREW +PTT 2.6X4 (S)	
102	7-623-508-01	LUG, 3	
103	*3-339-437-01	CASE (LOWER), H.A	
104	7-682-148-15	SCREW +P 3X8	
105	7-685-751-04	SCREW +PTT 3X6 (S)	
106	*3-339-423-01	HEAT SINK	
107	7-685-752-01	SCREW +PTT 3X8 (S)	
108	*3-339-415-01	BRACKET, IC	
109	*3-339-438-01	CASE (UPPER), H.A	
110	*3-339-414-01	RETAINER, TRANSISTOR	
111	3-339-424-01	COVER, CONNECTOR	
112	*3-326-001-01	COVER, JACK	
113	*3-339-466-01	SPACER (HA)	
114	3-703-264-11	LABEL (B), SERIAL NO	
115	9-911-841-XX	CUSHION	
931	*A-3260-535-A	MOUNTED PCB, HIDE-AWAY	
932	1-464-767-11	CONVERTER UNIT, DC-DC	
933	1-559-123-11	CORD (WITH CONNECTOR)	
CNP1	*1-563-162-11	SOCKET, CONNECTOR (ANTENNA)	
F701	1-532-422-00	FUSE, 6.3A	
F702	1-532-360-XX	FUSE, 1A	
F703	1-532-360-XX	FUSE, 1A	

K/100KX2
BAL/FADER)

No.	Part No.	Description	Remarks
151	*3-330-944-01	SPACER (LED)	
152	X-3320-558-1	BRACKET (B) (2) ASSY, INSULATOR	
153	3-330-916-01	SPRING, TENSION	
154	3-323-263-01	WASHER, TEFLON	
155	*3-330-943-01	BRACKET (A) (2), INSULATOR	
156	3-330-929-01	DAMPER (S), HYPER	
157	*3-330-919-01	BRACKET, LED PC BOARD	
158	*3-323-246-01	SPRING, TENSION	
159	3-330-930-01	RACK	
160	3-573-936-00	STOPPER, REEL	
161	3-330-917-01	SPRING (S)	
162	3-320-552-01	GEAR, DOWN	
163	3-330-904-01	GEAR (B2)	
164	3-330-903-01	GEAR (A2)	
165	7-628-253-00	SCREW +PS 2X4	
166	7-627-554-07	SCREW, PRECISION +P 2X2.2	
951	*1-622-018-11	PC BOARD, LED (D)	
D901	8-719-812-31	DIODE TLR123	
M901	X-3320-565-1	MOTOR ASSY, LOADING	
PM901	1-454-435-11	SOLENOID, PLUNGER	

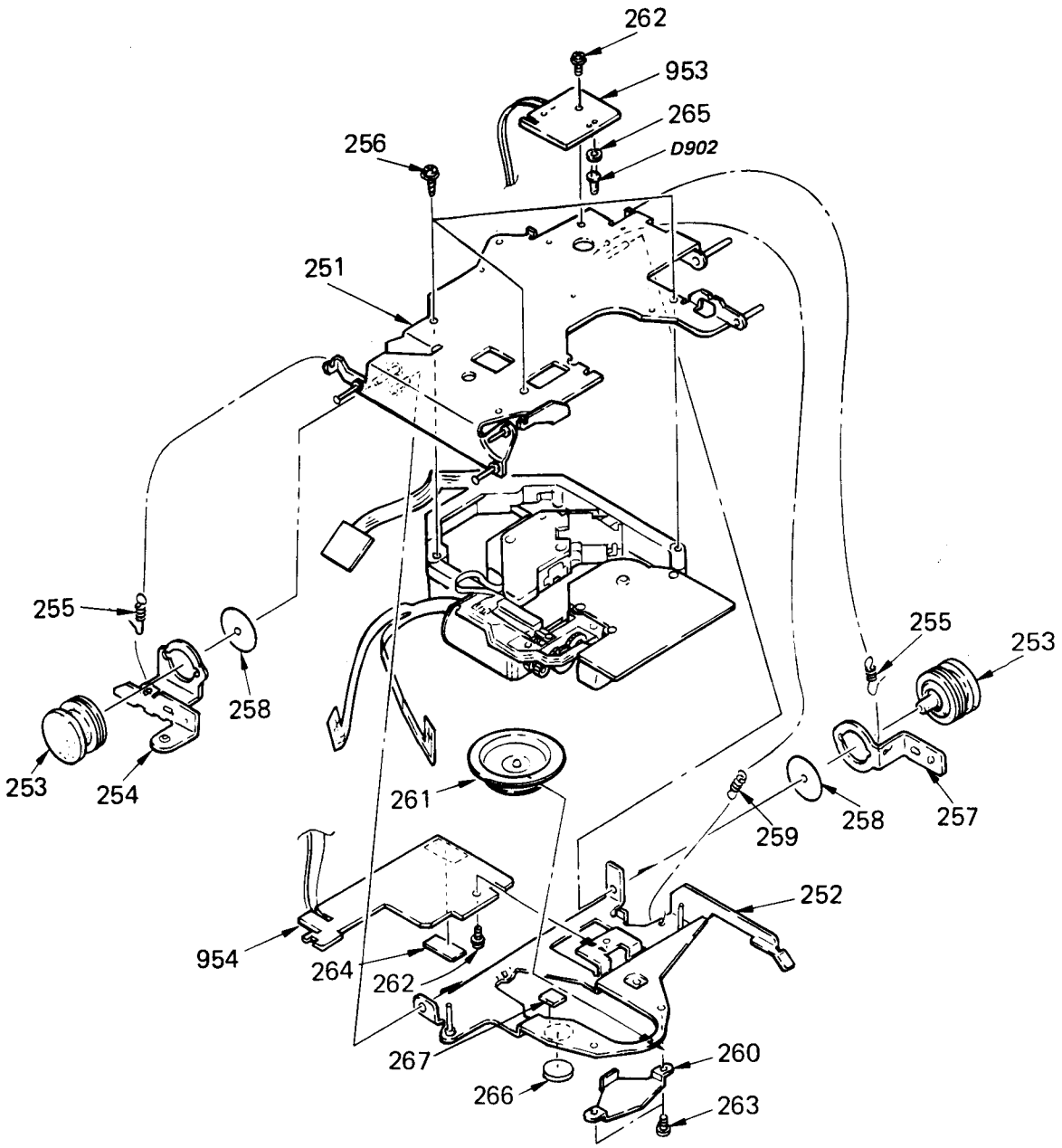
(5)



No.	Part No.	Description	Remarks
201	*X-3320-559-1	ARM (S) ASSY, ASSIST	
202	X-3320-566-1	ROLLER SHAFT	
203	X-3320-563-1	ARM (S2) ASSY, DRIVING ROLLER	
204	*X-3320-562-1	FRAME (S2) ASSY, MD	
205	X-3320-557-1	LEVER (S) ASSY, FRICTION	
206	3-330-917-01	SPRING (S)	
207	3-573-936-00	STOPPER, REEL	
208	3-320-560-01	BEARING (LOWER)	
209	3-701-438-31	WASHER	
210	3-323-231-02	ROLLER (LOWER)	
211	3-330-918-01	SPRING (S)	
212	*3-330-937-01	SHUTTER, DISK	
213	3-323-229-01	SHAFT (RIGHT), ROLLER ARM	

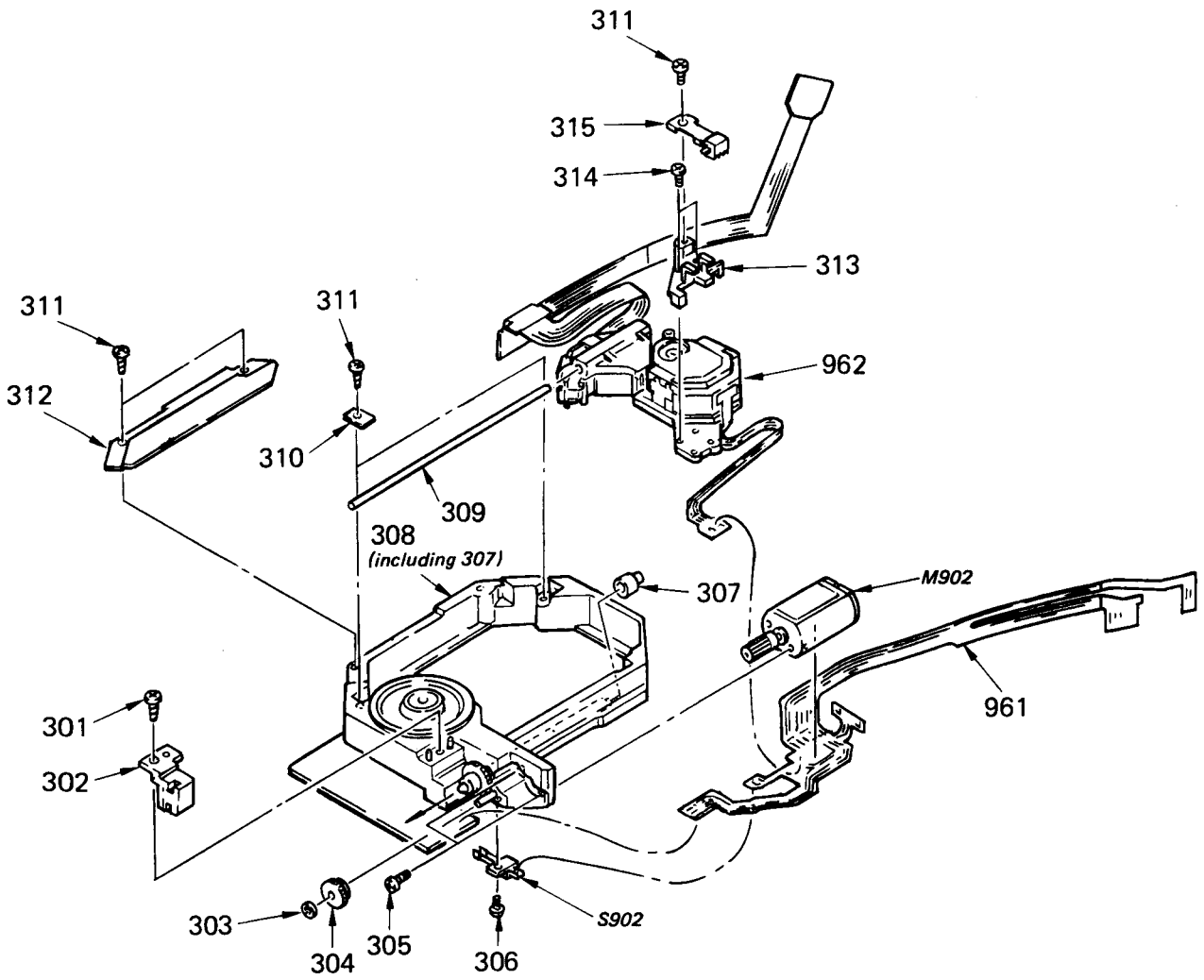
No.	Part No.	Description	Remarks
214	*3-329-899-01	SHAFT, ANGLE SELECTOR	
215	*3-330-934-01	GUIDE, SUPER DISK	
216	3-330-915-01	SPRING, TENSION	
217	*3-330-902-01	SELECTOR, FITTING SQUARE	
218	7-624-109-04	RETAINING, RING E-5	
219	*3-330-928-01	HOOK (B) (S), LOCK	
220	7-685-103-19	+ PTPWH (2X5)	
221	7-628-253-00	SCREW +PS 2X4	
222	7-627-554-07	SCREW, PRECISION +P 2X2.2	
223	7-624-104-04	STOP RING 2.0, TYPE -E	
224	7-627-452-38	SCREW, PRECISION +K 2X5, TYPE 1	
225	7-621-255-25	SCREW +P 2X4	
226	*3-330-980-01	SEET, SHUTTER	
952	*1-622-017-11	PC BOARD, DET (D)	

(6)



No.	Part No.	Description	Remarks
251	*X-3320-564-1	CHASSIS ASSY, MD FITTING	
252	X-3320-561-1	ARM (2) ASSY, CHUCKING	
253	3-330-929-01	DAMPER (S), HYPER	
254	*3-330-907-01	BRACKET (C) (2), INSULATOR	
255	3-330-916-01	SPRING, TENSION	
256	7-685-103-19	+ PTPWH (2X5)	
257	*3-330-908-01	BRACKET (D) (2), INSULATOR	
258	3-323-263-01	WASHER, TEFLON	
259	3-330-920-01	SPRING (CHUCKING), TENSION	
260	3-330-905-01	RETAINER (S), THRUST	
261	3-330-931-01	PLATE (S), CHUCK	
262	7-628-253-00	SCREW +PS 2X4	
263	7-627-552-18	SCREW, PRECISION +P 1.7X1.6	
264	*3-330-951-01	SHEET, INSULATING, DET (E)	
265	*3-330-944-01	SPACER (LED)	
266	3-323-290-01	CUSHION	
267	*3-330-979-01	SHEET (C.A.), PROTECTION	
953	*1-622-020-11	PC BOARD, LED (E)	
954	*1-622-019-11	PC BOARD, DET (E)	
D902	8-719-812-31	DIODE TLR123	

(7)



No.	Part No.	Description	Remarks
301	7-685-203-19	SCREW +K 2X5 TYPE2 NON-SLIT	
302	X-2640-611-1	RETAINER ASSY, THRUST	
303	3-321-813-01	WASHER, COTTER POLYETHYLENE	
304	2-640-625-01	GEAR (B)	
305	7-627-554-17	PRECISION SCREW +P 2X3.5 TYPE 3	
306	2-640-620-03	SCREW (B) (1.4X3), TAPPING	
307	2-640-629-02	RETAINER (C), THRUST	
308	X-3320-567-1	CHASSIS ASSY, MD SLED	307
309	*2-640-632-01	SHAFT, GUIDE	
310	2-640-645-01	RETAINER, GUIDE SHAFT	

No.	Part No.	Description	Remarks
311	7-685-102-19	SCREW +P 2X4 TYPE2 NON-SLIT	
312	2-640-623-01	COVER, MD	
313	2-640-638-01	BEARING, FEED GUIDE	
314	7-627-852-17	+P 1.7X4	
315	2-640-622-01	NUT, FEED	
961	1-621-406-11	PC BOARD, MOTOR FLEXIBLE	
962	⚠8-848-067-01	PICKUP, OPTICS KSS-1608	
M902	X-3320-568-1	MOTOR ASSY, SLED	
S902	1-554-938-11	SWITCH, LEAF (LIMIT)	

The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

Les composants identifiés par une trame et une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

SECTION 5
ELECTRICAL PARTS LIST

NOTE:
- Items marked " ★ " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- If there are two or more same circuitsin a set such as a stereophonic machine, only typical circuit parts may be indicated and capacitors and resistors in other same circuits may be omitted.

CAPACITORS:
MF:μF, PF:μμF.

RESISTORS
- All resistors are in ohms.
- F : nonflammable

COILS
- MMH : mH, UH : μH

SEMICONDUCTORS
In each case, U : μ, for example:
UA...: μA..., UPA...: μPA..., UPC...: μPC, UPD...: μPD...

The components identified by shading and mark ⚠ are critical for safety.
Replace only with part number specified.

Les composants identifiés par une trame et une marque ⚠ sont critiques pour la sécurité.
Ne les remplacer que par une pièce portant le numéro spécifié.

ELECTRICAL PARTS

Ref.No.	Part No.	Description			
901	*A-3216-149-A	INDICATION BLOCK ASSY			
902	A-3260-537-A	(US,Canadian)...MOUNTED PCB, MAIN			
	A-3260-570-A	(E).....MOUNTED PCB, MAIN			
	A-3260-576-A	(AEP).....MOUNTED PCB, MAIN			
903	A-3279-659-A	MOUNTED PCB, INDICATION			
904	*1-621-684-11	PC BOARD, VOL			
905	*1-621-947-11	PC BOARD, FOCUS			
906	1-621-946-11	PC BOARD, TRANSLATION			
907	1-559-086-11	CORD (WITH CONNECTOR)			
908	1-559-091-11	CORD (WITH TERMINAL)			
909	1-559-092-11	CORD (WITH JACK)			
910	1-559-093-11	CORD (WITH JACK)			
911	1-559-095-11	CORD (WITH PLUG)			
912	*1-559-235-11	CORD (WITH TERMINAL)			
931	*A-3260-535-A	MOUNTED PCB, HIDE-AWAY			
932	1-464-767-11	CONVERTER UNIT, DC-DC			
933	1-559-123-11	CORD (WITH CONNECTOR)			
951	*1-622-018-11	PC BOARD, LED (D)			
952	*1-622-017-11	PC BOARD, DET (D)			
953	*1-622-020-11	PC BOARD, LED (E)			
954	*1-622-019-11	PC BOARD, DET (E)			
961	1-621-406-11	PC BOARD, MOTOR FLEXIBLE			
962	⚠8-848-067-01	PICKUP, OPTICS KSS-160B			
C1	1-163-166-00	CERAMIC MELF	24PF	5%	50V
C2	1-163-063-00	CERAMIC MELF	0.022MF		25V
C3	1-124-892-11	ELECT	47MF	20%	10V
C4	1-163-063-00	CERAMIC MELF	0.022MF		25V
C5	1-163-059-00	CERAMIC MELF	0.01MF	20%	16V
C6	1-124-892-11	ELECT	47MF	20%	10V
C7	1-163-059-00	CERAMIC MELF	0.01MF	20%	16V
C8	1-163-063-00	CERAMIC MELF	0.022MF		25V
C9	1-163-169-00	CERAMIC MELF	33PF	5%	50V
C10	1-163-063-00	CERAMIC MELF	0.022MF		25V
C11	1-163-063-00	CERAMIC MELF	0.022MF		25V
C12	1-124-499-11	(US, Canadian, E)...ELECT	1MF	20%	50V
	1-131-345-00	(AEP).....TANTAL	0.47MF	20%	50V
C13	1-163-063-00	CERAMIC MELF	0.022MF		25V
C14	1-161-057-00	CERAMIC	0.033MF	10%	25V
C15	1-163-169-00	CERAMIC MELF	33PF	5%	50V
C16	1-163-063-00	CERAMIC MELF	0.022MF		25V
C17	1-124-925-11	ELECT	2.2MF	20%	50V
C18	1-163-169-00	CERAMIC MELF	33PF	5%	50V
C19	1-124-245-00	ELECT	4.7MF	20%	25V
C20	1-123-616-00	ELECT	4.7MF	20%	25V
C21	1-124-892-11	ELECT	47MF	20%	10V
C22	1-124-908-11	ELECT	22MF	20%	50V
C23	1-124-927-11	ELECT	4.7MF	20%	50V
C24	1-163-053-00	CERAMIC MELF	0.0033MF	20%	16V

ELECTRICAL PARTS

Ref.No.	Part No.	Description			
C25	1-136-487-11	FILM	0.015MF	5%	50V
C26	1-102-110-00	CERAMIC	220PF	10%	50V
C27	1-163-055-00	CERAMIC MELF	0.0047MF	20%	16V
C28	1-124-925-11	ELECT	2.2MF	20%	50V
C30	1-123-611-00	ELECT	1MF	20%	50V
C31	1-123-611-00	ELECT	1MF	20%	50V
C32	1-123-608-00	ELECT	0.22MF	20%	50V
C33	1-123-608-00	ELECT	0.22MF	20%	50V
C34	1-123-608-00	ELECT	0.22MF	20%	50V
C35	1-123-616-00	ELECT	4.7MF	20%	25V
C36	1-123-616-00	ELECT	4.7MF	20%	25V
C37	1-163-063-00	CERAMIC MELF	0.022MF		25V
C38	1-163-063-00	CERAMIC MELF	0.022MF		25V
C39	1-163-059-00	CERAMIC MELF	0.01MF	20%	16V
C40	1-124-892-11	ELECT	47MF	20%	10V
C41	1-124-902-00	ELECT	0.47MF	20%	50V
C42	1-124-892-11	ELECT	47MF	20%	10V
C43	1-136-157-00	FILM	0.022MF	5%	50V
C44	1-124-892-11	ELECT	47MF	20%	10V
C45	1-124-892-11	ELECT	47MF	20%	10V
C46	1-124-892-11	ELECT	47MF	20%	10V
C47	1-124-963-11	ELECT	33MF	20%	16V
C48	1-163-166-00	CERAMIC MELF	24PF	5%	50V
C49	1-162-356-11	CERAMIC MELF	10PF	5%	50V
C50	1-163-059-00	CERAMIC MELF	0.01MF	20%	16V
C51	1-163-063-00	CERAMIC MELF	0.022MF		25V
C52	1-124-927-11	ELECT	4.7MF	20%	50V
C53	1-163-059-00	CERAMIC MELF	0.01MF	20%	16V
C54	1-163-205-00	CERAMIC MELF	0.001MF	10%	50V
C55	1-124-907-00	ELECT	10MF	20%	50V
C56	1-124-499-11	ELECT	1MF	20%	50V
C57	1-124-499-11	ELECT	1MF	20%	50V
C58	1-163-181-00	CERAMIC MELF	100PF	10%	50V
C59	1-124-908-11	ELECT	22MF	20%	50V
C60	1-124-908-11	ELECT	22MF	20%	50V
C61	1-163-166-00	CERAMIC MELF	24PF	5%	50V
C62	1-124-925-11	ELECT	2.2MF	20%	50V
C63	1-124-892-11	ELECT	47MF	20%	10V
C64	1-124-245-00	ELECT	4.7MF	20%	25V
C65	1-163-169-00	CERAMIC MELF	33PF	5%	50V
C66	1-163-169-00	CERAMIC MELF	33PF	5%	50V
C67	1-163-075-00	CERAMIC	0.047MF	10%	25V
C68	1-101-005-00	CERAMIC	0.022MF		50V
C101	1-163-077-00	(HIDE-AWAY BOARD)...CERAMIC	0.1MF	20%	16V
C101	1-163-189-00	(MAIN BOARD).....CERAMIC CHIP	220PF	5%	50V
C102	1-124-767-00	ELECT	2.2MF	20%	50V

ELECTRICAL PARTS

Ref.No.	Part No.	Description			
C103	1-163-175-00	CERAMIC CHIP	56PF	5%	50V
C104	1-163-211-00	CERAMIC CHIP	0.0018MF	5%	50V
C105	1-163-181-00	CERAMIC CHIP	100PF	5%	50V
C106	1-163-181-00	CERAMIC CHIP	100PF	5%	50V
C107	1-163-188-00	CERAMIC CHIP	200PF	5%	50V
C108	1-163-181-00	CERAMIC CHIP	100PF	5%	50V
C109	1-124-767-00	ELECT	2.2MF	20%	50V
C110	1-124-270-11	ELECT	0.47MF	20%	50V
C111	1-124-233-00	ELECT	10MF	20%	10V
C112	1-130-479-00	FILM	0.0047MF	5%	50V
C113	1-136-156-00	FILM	0.018MF	5%	50V
C114	1-136-158-00	FILM	0.027MF	5%	50V
C115	1-136-498-91	FILM	0.12MF	5%	50V
C116	1-163-047-00	CERAMIC CHIP	0.001MF	10%	50V
C117	1-124-767-00	ELECT	2.2MF	20%	50V
C120	1-163-173-00	CERAMIC CHIP	47PF	5%	50V
C121	1-162-282-31	CERAMIC	100PF	10%	50V
C125	1-162-282-31	CERAMIC	100PF	10%	50V
C201	1-163-189-00	CERAMIC CHIP	220PF	5%	50V
C202	1-124-767-00	ELECT	2.2MF	20%	50V
C203	1-163-175-00	CERAMIC CHIP	56PF	5%	50V
C204	1-163-211-00	CERAMIC CHIP	0.0018MF	5%	50V
C205	1-163-181-00	CERAMIC CHIP	100PF	5%	50V
C206	1-163-181-00	CERAMIC CHIP	100PF	5%	50V
C207	1-163-188-00	CERAMIC CHIP	200PF	5%	50V
C208	1-163-181-00	CERAMIC CHIP	100PF	5%	50V
C209	1-124-767-00	ELECT	2.2MF	20%	50V
C210	1-124-270-11	ELECT	0.47MF	20%	50V
C211	1-124-233-00	ELECT	10MF	20%	10V
C212	1-130-479-00	FILM	0.0047MF	5%	50V
C213	1-136-156-00	FILM	0.018MF	5%	50V
C214	1-136-158-00	FILM	0.027MF	5%	50V
C215	1-136-498-91	FILM	0.12MF	5%	50V
C216	1-163-047-00	CERAMIC CHIP	0.001MF	10%	50V
C217	1-124-767-00	ELECT	2.2MF	20%	50V
C220	1-163-173-00	CERAMIC CHIP	47PF	5%	50V
C221	1-162-282-31	CERAMIC	100PF	10%	50V
C225	1-162-282-31	CERAMIC	100PF	10%	50V
C301	1-124-224-00	ELECT	47MF	20%	6.3V
C302	1-124-224-00	ELECT	47MF	20%	6.3V
C303	1-124-224-00	ELECT	47MF	20%	6.3V
C304	1-124-224-00	ELECT	47MF	20%	6.3V
C309	1-124-224-00	ELECT	47MF	20%	6.3V
C310	1-124-224-00	ELECT	47MF	20%	6.3V
C311	1-124-224-00	ELECT	47MF	20%	6.3V
C312	1-124-224-00	ELECT	47MF	20%	6.3V
C313	1-124-442-00	ELECT	330MF	20%	6.3V
C314	1-124-442-00	ELECT	330MF	20%	6.3V
C315	1-162-596-11	CERAMIC	0.022MF		50V
C316	1-162-596-11	CERAMIC	0.022MF		50V
C501	1-136-171-00	FILM	0.033MF	5%	50V
C502	1-136-153-00	FILM	0.01MF	5%	50V
C503	1-136-153-00	FILM	0.01MF	5%	50V
C505	1-124-225-00	ELECT	100MF	20%	6.3V
C506	1-136-171-00	FILM	0.033MF	5%	50V
C507	1-124-224-00	ELECT	47MF	20%	6.3V
C508	1-124-253-00	ELECT	0.47MF	20%	50V
C509	1-136-153-00	FILM	0.01MF	5%	50V
C510	1-126-123-11	ELECT	56MF	20%	6.3V
C511	1-124-224-00	ELECT	47MF	20%	6.3V

ELECTRICAL PARTS

Ref.No.	Part No.	Description			
C512	1-136-165-00	FILM	0.1MF	5%	50V
C513	1-136-165-00	FILM	0.1MF	5%	50V
C514	1-136-165-00	FILM	0.1MF	5%	50V
C515	1-131-368-00	TANTALUM	3.3MF	10%	16V
C516	1-124-224-00	ELECT	47MF	20%	6.3V
C517	1-136-165-00	FILM	0.1MF	5%	50V
C519	1-136-165-00	FILM	0.1MF	5%	50V
C520	1-102-947-00	CERAMIC	10PF	10%	50V
C521	1-136-175-00	FILM	0.068MF	5%	50V
C522	1-127-515-11	ELECT(SOLID)	47MF	20%	10V
C523	1-127-515-11	ELECT(SOLID)	47MF	20%	10V
C524	1-127-515-11	ELECT(SOLID)	47MF	20%	10V
C525	1-127-515-11	ELECT(SOLID)	47MF	20%	10V
C526	1-124-258-00	ELECT	3.3MF	20%	25V
C527	1-124-234-00	ELECT	22MF	20%	10V
C528	1-124-224-00	ELECT	47MF	20%	6.3V
C529	1-124-224-00	ELECT	47MF	20%	6.3V
C530	1-102-074-00	CERAMIC	0.001MF	10%	50V
C531	1-124-253-00	ELECT	0.47MF	20%	50V
C532	1-136-171-00	FILM	0.033MF	5%	50V
C533	1-136-375-11	FILM	0.0022MF	5%	50V
C534	1-136-156-00	FILM	0.018MF	5%	50V
C535	1-163-205-00	CERAMIC CHIP	0.001MF	5%	50V
C536	1-124-224-00	ELECT	47MF	20%	6.3V
C537	1-162-568-11	CERAMIC CHIP	0.33MF		25V
C538	1-136-379-00	FILM	0.0047MF	5%	50V
C539	1-124-255-00	ELECT	1MF	20%	50V
C540	1-124-255-00	ELECT	1MF	20%	50V
C541	1-163-289-00	CERAMIC CHIP	12PF	5%	50V
C542	1-163-289-00	CERAMIC CHIP	12PF	5%	50V
C543	1-124-229-00	ELECT	33MF	20%	10V
C545	1-124-229-00	ELECT	33MF	20%	10V
C546	1-124-225-00	ELECT	100MF	20%	6.3V
C547	1-163-289-00	CERAMIC CHIP	12PF	5%	50V
C548	1-163-289-00	CERAMIC CHIP	12PF	5%	50V
C550	1-124-244-61	ELECT	3.3MF	20%	35V
C551	1-124-484-11	ELECT	220MF	20%	35V
C552	1-124-224-00	ELECT	47MF	20%	6.3V
C553	1-163-205-00	CERAMIC CHIP	0.001MF	5%	50V
C554	1-124-224-00	ELECT	47MF	20%	6.3V
C555	1-124-224-00	ELECT	47MF	20%	6.3V
C556	1-163-315-91	CERAMIC CHIP	150PF	5%	50V
C557	1-163-077-00	CERAMIC CHIP	0.1MF		50V
C558	1-124-234-00	ELECT	22MF	20%	10V
C559	1-124-245-00	ELECT	4.7MF	20%	25V
C560	1-124-462-00	ELECT	10MF	20%	16V
C562	1-124-442-00	ELECT	330MF	20%	6.3V
C563	1-124-442-00	ELECT	330MF	20%	6.3V
C564	1-124-442-00	ELECT	330MF	20%	6.3V
C565	1-124-442-00	ELECT	330MF	20%	6.3V
C566	1-124-224-00	ELECT	47MF	20%	6.3V
C567	1-163-077-00	CERAMIC CHIP	0.1MF		50V
C568	1-124-236-00	ELECT	47MF	20%	16V
C569	1-163-189-00	CERAMIC CHIP	220PF	10%	50V
C570	1-163-077-00	CERAMIC CHIP	0.1MF		50V
C572	1-163-165-00	CERAMIC CHIP	20PF	5%	50V
C573	1-163-059-00	CERAMIC CHIP	0.01MF	10%	50V
C574	1-163-077-00	CERAMIC CHIP	0.1MF		50V

ELECTRICAL PARTS

Ref.No.	Part No.	Description		
C575	1-163-077-00	CERAMIC CHIP 0.1MF		50V
C576	1-163-077-00	CERAMIC CHIP 0.1MF		50V
C577	1-163-077-00	CERAMIC CHIP 0.1MF		50V
C578	1-163-059-00	CERAMIC CHIP 0.01MF	10%	50V
C579	1-163-047-00	CERAMIC CHIP 0.001MF	10%	50V
C580	1-163-063-00	CERAMIC CHIP 0.022MF	10%	50V
C581	1-163-063-00	CERAMIC CHIP 0.022MF	10%	50V
C582	1-163-063-00	CERAMIC CHIP 0.022MF	10%	50V
C583	1-131-375-00	TANTALUM 4.7MF	20%	10V
C584	1-161-055-00	CERAMIC 0.022MF	10%	50V
C585	1-161-494-00	CERAMIC 0.022MF		25V
C700	1-124-443-00	ELECT 100MF	20%	10V
C701	1-124-443-00	ELECT 100MF	20%	10V
C702	1-136-169-00	FILM 0.22MF	5%	50V
C703	1-136-169-00	FILM 0.22MF	5%	50V
C704	1-136-171-00	FILM 0.33MF	5%	50V
C705	1-136-171-00	FILM 0.33MF	5%	50V
C706	1-124-443-00	ELECT 100MF	20%	10V
C707	1-124-443-00	ELECT 100MF	20%	10V
C708	1-136-169-00	FILM 0.22MF	5%	50V
C709	1-136-169-00	FILM 0.22MF	5%	50V
C710	1-124-444-00	ELECT 220MF	20%	10V
C711	1-124-444-00	ELECT 220MF	20%	10V
C712	1-124-499-11	ELECT 1MF	20%	50V
C713	1-124-499-11	ELECT 1MF	20%	50V
C714	1-124-443-00	ELECT 100MF	20%	10V
C715	1-124-443-00	ELECT 100MF	20%	10V
C716	1-136-157-00	FILM 0.022MF	5%	50V
C717	1-136-157-00	FILM 0.022MF	5%	50V
C718	1-124-443-00	ELECT 100MF	20%	10V
C719	1-124-443-00	ELECT 100MF	20%	10V
C720	1-163-205-00	CERAMIC MELF 0.001MF	10%	50V
C721	1-163-205-00	CERAMIC MELF 0.001MF	10%	50V
C722	1-124-499-11	ELECT 1MF	20%	50V
C723	1-124-499-11	ELECT 1MF	20%	50V
C724	1-124-278-00	ELECT 10MF	20%	25V
C725	1-124-278-00	ELECT 10MF	20%	25V
C726	1-124-767-00	ELECT 2.2MF	20%	50V
C727	1-124-767-00	ELECT 2.2MF	20%	50V
C728	1-124-445-00	ELECT 100MF	20%	16V
C729	1-124-343-00	ELECT 2200MF	20%	16V
C730	1-124-445-00	ELECT 100MF	20%	16V
C731	1-124-445-00	ELECT 100MF	20%	16V
C732	1-163-177-00	CERAMIC MELF 68PF	5%	50V
C733	1-163-177-00	CERAMIC MELF 68PF	5%	50V
C734	1-163-177-00	CERAMIC MELF 68PF	5%	50V
C735	1-163-177-00	CERAMIC MELF 68PF	5%	50V
C901	1-135-093-21	TANTAL. CHIP 10MF	10%	16V
CF1	1-567-415-11	FILTER, CERAMIC		
CF2	1-567-415-11	FILTER, CERAMIC		
CNJ1	1-563-163-41	JACK, PIN (WHITE)		
CNJ2	1-563-163-51	JACK, PIN (RED)		
CNP1	*1-563-162-11	SOCKET, CONNECTOR (ANTENNA)		
CNP301	*1-564-007-00	PIN, CONNECTOR 8P		
CNP302	*1-564-006-51	PIN, CONNECTOR 7P		
CNP501	*1-563-855-11	HOUSING, CONNECTOR 12P		

ELECTRICAL PARTS

Ref.No.	Part No.	Description
CNP502	1-562-630-11	SOCKET, CONNECTOR
CNP503	1-562-631-11	SOCKET, CONNECTOR
CNP504	*1-564-015-00	PIN, CONNECTOR 5P
CNP505	*1-564-013-00	PIN, CONNECTOR 3P
CNP506	*1-564-012-00	PIN, CONNECTOR 2P
CNP507	*1-564-006-51	PIN, CONNECTOR 7P
CNP508	*1-564-007-00	PIN, CONNECTOR 8P
CNP509	*1-564-008-51	PIN, CONNECTOR 9P
CNP510	*1-564-002-00	PIN, CONNECTOR 3P
CNP511	*1-564-003-00	PIN, CONNECTOR 4P
CNP512	*1-564-003-00	PIN, CONNECTOR 4P
CNP513	*1-564-009-51	PIN, CONNECTOR 10P
CNP514	*1-564-011-51	PIN, CONNECTOR 12P
CNP701	1-162-143-00	CONNECTOR (FEED-THROUGH CAP)
CNP702	1-566-407-11	PIN, CONNECTOR 22P
D001	8-719-100-80	DIODE RD20EB2
D1	8-719-812-31	DIODE TLR123
D2	8-719-940-38	DIODE DCB015
D3	8-719-901-33	DIODE 1SS133
D4	8-719-940-38	DIODE DCB015
D5	8-719-940-38	DIODE DCB015
D6	8-719-940-38	DIODE DCB015
D7	8-719-940-38	DIODE DCB015
D8	8-719-109-90	DIODE RD5.6ES-B3
D9	8-719-110-17	DIODE RD10ES-B2
D10	8-719-109-68	DIODE RD3.6ES-B1
D11	8-719-110-43	DIODE RD16ES-B
D12	8-719-110-43	DIODE RD16ES-B
D13	8-719-901-33	DIODE 1SS133
D14	8-719-901-33	DIODE 1SS133
D502	8-719-940-25	DIODE DSC010
D503	8-719-940-25	DIODE DSC010
D504	8-719-200-02	DIODE 10E2
D505	8-719-100-35	DIODE RD5.6EB2
D506	8-719-911-06	DIODE 1SS106
D507	8-719-940-25	DIODE DSC010
D508	8-719-940-35	DIODE DCA015
D509	8-719-940-35	DIODE DCA015
D510	8-719-109-99	DIODE RD7.5ES-B
D700	8-719-920-04	DIODE ERB12-01RK
D701	8-719-911-55	DIODE U05G
D702	8-719-920-04	DIODE ERB12-01RK
D703	8-719-920-04	DIODE ERB12-01RK
D704	8-719-940-38	DIODE DCB015
D801	8-719-404-22	DIODE LN1451C
D802	8-719-404-22	DIODE LN1451C
D803	8-719-404-22	DIODE LN1451C
D804	8-719-404-22	DIODE LN1451C
D805	8-719-404-22	DIODE LN1451C
D806	8-719-404-27	DIODE LN1261C
D807	8-719-945-09	DIODE BG3668S
D808	8-719-945-10	DIODE AA3668S
D809	8-719-945-08	DIODE BR4868K
D810	8-719-945-08	DIODE BR4868K
D811	8-719-945-08	DIODE BR4868K
D812	8-719-945-08	DIODE BR4868K
D813	8-719-945-08	DIODE BR4868K
D814	8-719-945-08	DIODE BR4868K

ELECTRICAL PARTS

Ref.No.	Part No.	Description
D815	8-719-404-22	DIODE LN1451C
D816	8-719-404-22	DIODE LN1451C
D817	8-719-404-22	DIODE LN1451C
D818	8-719-404-22	DIODE LN1451C
D819	8-719-404-22	DIODE LN1451C
D820	8-719-404-22	DIODE LN1451C
D821	8-719-404-22	DIODE LN1451C
D822	8-719-404-22	DIODE LN1451C
D823	8-719-404-22	DIODE LN1451C
D824	8-719-404-22	DIODE LN1451C
D825	8-719-404-22	DIODE LN1451C
D830	8-719-110-17	DIODE RD10ES-B2
D901	8-719-940-25	(FOR FOCUS BOARD)....DIODE DSC010
D901	8-719-812-31	(FOR LED(D) BOARD)...DIODE TLR123
D902	8-719-812-31	DIODE TLR123
F701	1-532-422-00	FUSE, 6.3A
F702	1-532-360-XX	FUSE, 1A
F703	1-532-360-XX	FUSE, 1A
FE1	1-463-839-11	FM FRONT END
FE2	1-463-838-11	TUNER UNIT, AM
FL1	1-519-324-21	INDICATOR TUBE, FLUORESCENT
IC1	8-759-811-40	IC LA1140
IC2	1-807-502-11	IC STK3400 (75US)
IC3	8-759-170-08	IC UPC78M08H
IC4	8-757-925-20	IC CX-7925B
IC5	8-759-940-94	IC MSM4094RS
IC6	8-759-240-69	IC TC4069UBP
IC101	8-759-604-64	IC M5203FP
IC102	8-759-604-64	IC M5203FP
IC201	8-759-604-64	IC M5203FP
IC202	8-759-604-64	IC M5203FP
IC301	8-759-924-49	IC PCM55HP-S
IC302	8-759-200-81	IC TC4053BF
IC303	8-759-200-81	IC TC4053BF
IC304	8-759-109-70	IC UPC4560G2
IC501	8-759-937-87	IC CXA1081Q
IC502	8-752-031-65	IC CXA1082AQ
IC503	8-752-322-32	IC CXD1130Q
IC504	8-759-940-89	IC L272M
IC505	8-759-942-55	IC MB88505H-530M
IC506	8-759-940-87	(US Canadian)...IC MB88505-503M
IC506	8-759-942-56	(E).....IC MB88505H-538M
IC506	8-759-942-66	(AEP)...IC MB88505H-540M
IC507	8-752-802-74	IC LC3516AML-15
IC508	8-759-604-67	IC M54940FP
IC509	8-759-102-82	IC UPD82C43G
IC510	8-759-804-66	IC LC74HC365M
IC512	8-759-940-80	IC MB88201-534M
IC513	8-759-204-96	IC TC74HC04F
IC514	8-759-920-28	IC S-8054HN
IC515	8-759-920-28	IC S-8054HN
IC516	8-759-920-28	IC S-8054HN
IC700	8-759-100-96	IC UPC4560G2
IC701	8-759-206-94	IC TA7281P
IC702	8-759-206-94	IC TA7281P
IC801	8-759-200-99	IC TC4051BF
JW501	1-249-366-11	CARBON MELF 0 5% 1/5W
JW502	1-249-366-11	CARBON MELF 0 5% 1/5W
JW503	1-249-366-11	CARBON MELF 0 5% 1/5W
JW504	1-249-366-11	CARBON MELF 0 5% 1/5W

ELECTRICAL PARTS

Ref.No.	Part No.	Description
L1	1-410-324-11	MICRO INDUCTOR 4.7UH
L3	1-408-412-00	MICRO INDUCTOR 18UH
L4	1-408-412-00	MICRO INDUCTOR 18UH
L5	1-410-334-11	MICRO INDUCTOR 100UH
L101	1-410-220-31	INDUCTOR CHIP 220UH
L201	1-410-220-31	INDUCTOR CHIP 220UH
L301	1-410-198-51	INDUCTOR CHIP 3.3UH
L302	1-410-198-51	INDUCTOR CHIP 3.3UH
L501	1-410-336-11	MICRO INDUCTOR 220UH
L502	1-410-204-41	INDUCTOR CHIP 10UH
L503	1-410-198-51	INDUCTOR CHIP 3.3UH
L504	1-410-198-51	INDUCTOR CHIP 3.3UH
L505	1-410-200-31	INDUCTOR CHIP 4.7UH
L506	1-410-200-31	INDUCTOR CHIP 4.7UH
L700	1-459-123-00	COIL, DUST CORE (PAC)
L701	1-421-369-00	COIL, CHOKE
L702	1-459-123-00	COIL, DUST CORE (PAC)
M901	X-3320-565-1	MOTOR ASSY, LOADING
M902	X-3320-568-1	MOTOR ASSY, SLED
PL801	1-518-615-11	LAMP, PILOT
PL802	1-518-615-11	LAMP, PILOT
PM901	1-454-435-11	SOLENOID, PLUNGER
Q001	8-729-901-00	TRANSISTOR DTC124EK
Q1	8-729-600-27	TRANSISTOR 2SC634SP
Q2	8-729-100-76	TRANSISTOR 2SA812
Q3	8-729-271-23	TRANSISTOR 2SC2712
Q5	8-729-245-82	TRANSISTOR 2SC2458-Y
Q6	8-729-806-04	TRANSISTOR 2SA1503
Q7	8-729-245-82	TRANSISTOR 2SC2458-Y
Q8	8-729-245-82	TRANSISTOR 2SC2458-Y
Q9	8-729-881-23	TRANSISTOR 2SC2812L7
Q10	8-729-881-23	TRANSISTOR 2SC2812L7
Q11	8-729-807-33	TRANSISTOR 2SB1123
Q12	8-729-805-41	TRANSISTOR 2SC3398
Q13	8-729-100-76	TRANSISTOR 2SA812
Q14	8-729-805-41	TRANSISTOR 2SC3398
Q15	9-986-159-01	TRANSISTOR 2SA1348
Q16	8-729-245-82	TRANSISTOR 2SC2458-Y
Q17	8-729-805-20	TRANSISTOR 2SB1202
Q18	8-729-805-45	TRANSISTOR 2SC3395
Q19	8-729-218-43	TRANSISTOR 2SK184-GR
Q20	8-729-245-82	TRANSISTOR 2SC2458-Y
Q21	8-729-271-23	TRANSISTOR 2SC2712
Q30	8-729-271-23	TRANSISTOR 2SC2712
Q501	8-729-807-50	TRANSISTOR 2SD1623
Q502	8-729-807-33	TRANSISTOR 2SB1123
Q503	8-729-807-50	TRANSISTOR 2SD1623
Q504	8-729-807-33	TRANSISTOR 2SB1123
Q505	8-729-100-76	TRANSISTOR 2SA812
Q506	8-729-807-33	TRANSISTOR 2SB1123
Q507	8-729-271-23	TRANSISTOR 2SC2712
Q508	8-729-805-65	TRANSISTOR 2SA1344
Q509	8-729-805-65	TRANSISTOR 2SA1344
Q510	8-729-805-45	TRANSISTOR 2SC3395
Q511	8-729-805-41	TRANSISTOR 2SC3398
Q512	8-729-100-76	TRANSISTOR 2SA812

ELECTRICAL PARTS

Ref.No.	Part No.	Description
Q513	8-729-100-76	TRANSISTOR 2SA812
Q514	8-729-100-76	TRANSISTOR 2SA812
Q515	8-729-100-76	TRANSISTOR 2SA812
Q516	8-729-807-50	TRANSISTOR 2SD1623-R
Q517	8-729-100-76	TRANSISTOR 2SA812
Q518	8-729-271-23	TRANSISTOR 2SC2712
Q519	8-729-271-23	TRANSISTOR 2SC2712
Q520	8-729-271-23	TRANSISTOR 2SC2712
Q522	8-729-805-45	TRANSISTOR 2SC3395
Q523	8-729-904-63	TRANSISTOR DTB123YK
Q524	8-729-805-41	TRANSISTOR 2SC3398
Q525	8-729-904-63	TRANSISTOR DTB123YK
Q526	8-729-881-23	TRANSISTOR 2SC2812L-27
Q528	8-729-805-41	TRANSISTOR 2SC3398
Q529	8-729-805-41	TRANSISTOR 2SC3398
Q530	8-729-805-41	TRANSISTOR 2SC3398
Q531	8-729-805-41	TRANSISTOR 2SC3398
Q532	8-729-805-41	TRANSISTOR 2SC3398
Q533	8-729-900-99	TRANSISTOR DTA144WK
Q534	8-729-805-41	TRANSISTOR 2SC3398
Q536	8-729-904-48	TRANSISTOR DTB113EK
Q537	8-729-904-48	TRANSISTOR DTB113EK
Q538	8-729-904-78	TRANSISTOR DTD113ZK
Q539	8-729-904-78	TRANSISTOR DTD113ZK
Q540	8-729-271-23	TRANSISTOR 2SC2712
Q541	8-729-805-64	TRANSISTOR 2SA1510
Q700	8-729-805-45	TRANSISTOR 2SC3395
Q701	8-729-904-75	TRANSISTOR DTD114EK
Q801	8-729-807-50	TRANSISTOR 2SD1623-R
Q901	8-729-805-45	(FOR FOCUS BOARD)...TRANSISTOR 2SC3395
Q901	8-729-402-08	(FOR DET (D) BOARD) ....TRANSISTOR PN147-LF-R
Q902	8-729-805-65	(FOR FOCUS BOARD)...TRANSISTOR 2SA1344
Q902	8-729-402-08	(FOR DET (E) BOARD) ....TRANSISTOR PN147-LF-R
R001	1-249-417-11	CARBON MELF 1K 5% 1/6W
R1	1-249-425-11	CARBON MELF 4.7K 5% 1/5W
R2	1-249-429-11	CARBON MELF 10K 5% 1/5W
R3	1-249-441-11	CARBON MELF 100K 5% 1/5W
R4	1-249-411-11	CARBON MELF 330 5% 1/5W
R5	1-249-393-11	CARBON MELF 10 5% 1/5W
R6	1-249-440-11	CARBON MELF 82K 5% 1/5W
R7	1-249-436-11	CARBON MELF 39K 5% 1/5W
R8	1-249-433-11	CARBON 22K 5% 1/4W
R9	1-249-437-11	CARBON MELF 47K 5% 1/5W
R10	1-249-429-11	CARBON MELF 10K 5% 1/5W
R11	1-249-422-11	CARBON MELF 2.7K 5% 1/5W
R12	1-249-437-11	CARBON MELF 47K 5% 1/5W
R13	1-249-433-11	(US,Canadian,E)..CARBON 22K 5% 1/4W
	1-249-438-11	(AEP).....CARBON 56K 5% 1/5W
R14	1-249-435-11	CARBON MELF 33K 5% 1/5W
R15	1-249-433-11	CARBON MELF 22K 5% 1/5W
R17	1-215-493-00	CARBON MELF 1M 5% 1/5W
R18	1-249-429-11	CARBON MELF 10K 5% 1/5W
R19	1-249-423-11	CARBON MELF 3.3K 5% 1/5W
R20	1-247-849-00	CARBON MELF 5.6K 5% 1/5W
R21	1-249-437-11	CARBON MELF 47K 5% 1/5W
R22	1-249-433-11	CARBON MELF 22K 5% 1/5W
R23	1-215-452-00	CARBON MELF 20K 5% 1/5W
R24	1-215-442-00	CARBON MELF 7.5K 5% 1/5W

ELECTRICAL PARTS

Ref.No.	Part No.	Description
R25	1-249-433-11	CARBON MELF 22K 5% 1/5W
R26	1-249-429-11	CARBON MELF 10K 5% 1/5W
R27	1-249-429-11	CARBON MELF 10K 5% 1/5W
R28	1-215-438-00	CARBON MELF 5.1K 5% 1/5W
R29	1-249-421-11	CARBON MELF 2.2K 5% 1/5W
R30	1-249-431-11	CARBON MELF 15K 5% 1/5W
R31	1-249-431-11	CARBON MELF 15K 5% 1/5W
R32	1-215-489-00	CARBON MELF 680K 5% 1/5W
R33	1-215-481-00	CARBON MELF 330K 5% 1/5W
R34	1-215-481-00	CARBON MELF 330K 5% 1/5W
R35	1-215-489-00	CARBON MELF 680K 5% 1/5W
R36	1-249-414-11	CARBON MELF 560 5% 1/5W
R37	1-249-414-11	CARBON MELF 560 5% 1/5W
R38	1-249-429-11	CARBON MELF 10K 5% 1/5W
R39	1-249-429-11	CARBON MELF 10K 5% 1/5W
R40	1-249-417-11	CARBON MELF 1K 5% 1/5W
R41	1-249-417-11	CARBON MELF 1K 5% 1/5W
R42	1-249-429-11	CARBON MELF 10K 5% 1/5W
R44	1-249-429-11	CARBON MELF 10K 5% 1/5W
R45	1-249-417-11	CARBON MELF 1K 5% 1/5W
R46	1-249-429-11	CARBON MELF 10K 5% 1/5W
R47	1-249-441-11	CARBON MELF 100K 5% 1/5W
R48	1-249-437-11	CARBON MELF 47K 5% 1/5W
R49	1-249-411-11	CARBON MELF 330 5% 1/5W
R50	1-249-417-11	CARBON MELF 1K 5% 1/5W
R52	1-249-433-11	CARBON MELF 22K 5% 1/5W
R53	1-249-438-11	CARBON MELF 56K 5% 1/5W
R54	1-215-458-00	CARBON MELF 36K 5% 1/5W
R55	1-249-417-11	CARBON MELF 1K 5% 1/5W
R56	1-249-417-11	CARBON MELF 1K 5% 1/5W
R57	1-249-438-11	CARBON MELF 56K 5% 1/5W
R58	1-215-477-00	CARBON MELF 220K 5% 1/5W
R59	1-249-429-11	CARBON MELF 10K 5% 1/5W
R60	1-247-849-00	CARBON MELF 5.6K 5% 1/5W
R61	1-249-421-11	CARBON MELF 2.2K 5% 1/5W
R62	1-249-425-11	CARBON MELF 4.7K 5% 1/5W
R63	1-249-419-11	CARBON MELF 1.5K 5% 1/5W
R64	1-249-423-11	CARBON MELF 3.3K 5% 1/5W
R65	1-249-419-11	CARBON MELF 1.5K 5% 1/5W
R66	1-249-423-11	CARBON MELF 3.3K 5% 1/5W
R67	1-249-419-11	CARBON MELF 1.5K 5% 1/5W
R68	1-249-417-11	CARBON MELF 1K 5% 1/5W
R69	1-249-417-11	CARBON MELF 1K 5% 1/5W
R70	1-215-481-00	CARBON MELF 330K 5% 1/5W
R71	1-215-493-00	CARBON MELF 1M 5% 1/5W
R72	1-247-868-00	CARBON 36K 5% 1/6W
R73	1-249-441-11	CARBON 100K 5% 1/6W
R74	1-249-438-11	CARBON MELF 56K 5% 1/5W
R75	1-249-429-11	CARBON MELF 10K 5% 1/5W
R77	1-249-417-11	CARBON MELF 1K 5% 1/5W
R76	1-249-425-11	CARBON MELF 4.7K 5% 1/5W
R101	1-215-477-00	(HIDE-AWAY BOARD)...CARBON MELF 220K 5% 1/5W
R101	1-249-425-11	(MAIN BOARD)..... ...CARBON MELF 4.7K 5% 1/5W
R102	1-249-432-11	CARBON MELF 18K 5% 1/5W
R103	1-215-456-00	CARBON MELF 30K 5% 1/5W
R104	1-249-435-11	CARBON MELF 33K 5% 1/5W
R105	1-215-452-00	CARBON MELF 20K 5% 1/5W
R106	1-215-452-00	CARBON MELF 20K 5% 1/5W
R108	1-215-444-00	CARBON MELF 9.1K 5% 1/5W

ELECTRICAL PARTS

Ref.No.	Part No.	Description			
R109	1-249-432-11	CARBON MELF	18K	5%	1/5W
R110	1-249-432-11	CARBON MELF	18K	5%	1/5W
R111	1-215-444-00	CARBON MELF	9.1K	5%	1/5W
R112	1-215-458-00	CARBON MELF	36K	5%	1/5W
R113	1-249-429-11	CARBON MELF	10K	5%	1/5W
R114	1-249-421-11	CARBON MELF	2.2K	5%	1/5W
R115	1-249-038-00	CARBON MELF	1.2K	5%	1/5W
R116	1-215-485-00	CARBON MELF	470K	5%	1/5W
R117	1-249-413-11	CARBON MELF	470	5%	1/5W
R118	1-249-430-11	CARBON MELF	12K	5%	1/5W
R119	1-215-432-00	CARBON MELF	3K	5%	1/5W
R120	1-215-493-00	CARBON MELF	1M	5%	1/5W
R121	1-249-038-00	CARBON MELF	1.2K	5%	1/5W
R122	1-249-413-11	CARBON MELF	470	5%	1/5W
R123	1-216-242-00	METAL CHIP	68K	5%	1/8W
R124	1-216-225-00	METAL CHIP	13K	5%	1/8W
R125	1-249-425-11	CARBON MELF	4.7K	5%	1/5W
R126	1-215-418-00	CARBON MELF	750	5%	1/5W
R201	1-249-425-11	CARBON MELF	4.7K	5%	1/5W
R202	1-249-432-11	CARBON MELF	18K	5%	1/5W
R203	1-215-456-00	CARBON MELF	30K	5%	1/5W
R204	1-249-435-11	CARBON MELF	33K	5%	1/5W
R205	1-215-452-00	CARBON MELF	20K	5%	1/5W
R206	1-215-452-00	CARBON MELF	20K	5%	1/5W
R208	1-215-444-00	CARBON MELF	9.1K	5%	1/5W
R209	1-249-432-11	CARBON MELF	18K	5%	1/5W
R210	1-249-432-11	CARBON MELF	18K	5%	1/5W
R211	1-215-444-00	CARBON MELF	9.1K	5%	1/5W
R212	1-215-458-00	CARBON MELF	36K	5%	1/5W
R213	1-249-429-11	CARBON MELF	10K	5%	1/5W
R214	1-249-421-11	CARBON MELF	2.2K	5%	1/5W
R215	1-249-038-00	CARBON MELF	1.2K	5%	1/5W
R216	1-215-485-00	CARBON MELF	470K	5%	1/5W
R217	1-249-413-11	CARBON MELF	470	5%	1/5W
R218	1-249-430-11	CARBON MELF	12K	5%	1/5W
R219	1-215-432-00	CARBON MELF	3K	5%	1/5W
R220	1-215-493-00	CARBON MELF	1M	5%	1/5W
R221	1-249-038-00	CARBON MELF	1.2K	5%	1/5W
R222	1-249-413-11	CARBON MELF	470	5%	1/5W
R223	1-216-242-00	METAL CHIP	68K	5%	1/8W
R224	1-216-225-00	METAL CHIP	13K	5%	1/8W
R225	1-249-425-11	CARBON MELF	4.7K	5%	1/5W
R226	1-215-418-00	CARBON MELF	750	5%	1/5W
R301	1-249-429-11	CARBON MELF	10K	5%	1/5W
R303	1-249-425-11	CARBON MELF	4.7K	5%	1/5W
R304	1-249-425-11	CARBON MELF	4.7K	5%	1/5W
R501	1-215-446-00	CARBON MELF	11K	5%	1/5W
R503	1-215-448-00	CARBON MELF	13K	5%	1/5W
R504	1-249-421-11	CARBON MELF	2.2K	5%	1/5W
R505	1-215-392-00	CARBON MELF	62	5%	1/5W
R506	1-249-417-11	CARBON MELF	1K	5%	1/5W
R507	1-215-394-00	CARBON MELF	75	5%	1/5W
R508	1-249-429-11	CARBON MELF	10K	5%	1/5W
R509	1-249-441-11	CARBON MELF	100K	5%	1/5W
R510	1-215-446-00	CARBON MELF	11K	5%	1/5W
R511	1-215-474-00	CARBON MELF	160K	5%	1/5W
R512	1-249-429-11	CARBON MELF	10K	5%	1/5W

ELECTRICAL PARTS

Ref.No.	Part No.	Description			
R513	1-215-485-00	CARBON MELF	470K	5%	1/5W
R514	1-249-440-11	CARBON MELF	82K	5%	1/5W
R515	1-249-438-11	CARBON MELF	56K	5%	1/5W
R516	1-249-440-11	CARBON MELF	82K	5%	1/5W
R517	1-215-471-00	CARBON MELF	120K	5%	1/5W
R518	1-249-431-11	CARBON MELF	15K	5%	1/5W
R519	1-249-428-11	CARBON MELF	8.2K	5%	1/5W
R520	1-215-486-00	CARBON MELF	510K	5%	1/5W
R521	1-249-429-11	CARBON MELF	10K	5%	1/5W
R522	1-249-439-11	CARBON MELF	68K	5%	1/5W
R523	1-249-423-11	CARBON MELF	3.3K	5%	1/5W
R524	1-215-452-00	CARBON MELF	20K	5%	1/5W
R525	1-215-493-00	CARBON MELF	1M	5%	1/5W
R526	1-249-001-00	CARBON MELF	1	5%	1/5W
R527	1-249-001-00	CARBON MELF	1	5%	1/5W
R528	1-249-001-00	CARBON MELF	1	5%	1/5W
R529	1-249-001-00	CARBON MELF	1	5%	1/5W
R530	1-215-485-00	CARBON MELF	470K	5%	1/5W
R531	1-249-429-11	CARBON MELF	10K	5%	1/5W
R533	1-249-429-11	CARBON MELF	10K	5%	1/5W
R534	1-249-441-11	CARBON MELF	100K	5%	1/5W
R535	1-249-429-11	CARBON MELF	10K	5%	1/5W
R536	1-249-441-11	CARBON MELF	100K	5%	1/5W
R537	1-249-429-11	CARBON MELF	10K	5%	1/5W
R538	1-249-429-11	CARBON MELF	10K	5%	1/5W
R540	1-249-408-11	CARBON MELF	180	5%	1/5W
R541	1-249-408-11	CARBON MELF	180	5%	1/5W
R542	1-215-454-00	CARBON MELF	24K	5%	1/5W
R543	1-249-429-11	CARBON MELF	10K	5%	1/5W
R544	1-249-413-11	CARBON MELF	470	5%	1/5W
R545	1-249-442-11	CARBON MELF	510	5%	1/5W
R546	1-249-417-11	CARBON MELF	1K	5%	1/5W
R547	1-249-433-11	CARBON MELF	22K	5%	1/5W
R548	1-249-417-11	CARBON MELF	1K	5%	1/5W
R549	1-249-433-11	CARBON MELF	22K	5%	1/5W
R550	1-249-405-11	CARBON MELF	100	5%	1/5W
R551	1-249-433-11	CARBON MELF	22K	5%	1/5W
R552	1-249-437-11	CARBON MELF	47K	5%	1/5W
R553	1-249-423-11	CARBON MELF	3.3K	5%	1/5W
R554	1-249-399-11	CARBON MELF	33	5%	1/5W
R555	1-249-429-11	CARBON MELF	10K	5%	1/5W
R556	1-249-433-11	CARBON MELF	22K	5%	1/5W
R557	1-249-441-11	CARBON MELF	100K	5%	1/5W
R558	1-215-440-00	CARBON MELF	6.2K	5%	1/5W
R559	1-249-437-11	CARBON MELF	47K	5%	1/5W
R560	1-249-408-11	CARBON MELF	180	5%	1/5W
R561	1-249-408-11	CARBON MELF	180	5%	1/5W
R562	1-249-408-11	CARBON MELF	180	5%	1/5W
R563	1-249-408-11	CARBON MELF	180	5%	1/5W
R564	1-249-408-11	CARBON MELF	180	5%	1/5W
R565	1-249-408-11	CARBON MELF	180	5%	1/5W
R566	1-249-408-11	CARBON MELF	180	5%	1/5W
R567	1-249-408-11	CARBON MELF	180	5%	1/5W
R568	1-249-393-11	CARBON MELF	10	5%	1/5W
R569	1-249-393-11	CARBON MELF	10	5%	1/5W
R570	1-249-402-11	CARBON MELF	56	5%	1/5W
R571	1-215-392-00	CARBON MELF	62	5%	1/5W

ELECTRICAL PARTS

Ref.No.	Part No.	Description			
R572	1-249-405-11	CARBON MELF	100	5%	1/5W
R574	1-249-425-11	CARBON MELF	4.7K	5%	1/5W
R575	1-249-429-11	CARBON MELF	10K	5%	1/5W
R576	1-249-097-00	CARBON MELF	91	5%	1/5W
R578	1-249-428-11	CARBON MELF	8.2K	5%	1/5W
R579	1-249-422-11	CARBON MELF	2.7K	5%	1/5W
R580	1-215-440-00	CARBON MELF	6.2K	5%	1/5W
R581	1-215-481-00	CARBON MELF	330K	5%	1/5W
R582	1-249-429-11	CARBON MELF	10K	5%	1/5W
R583	1-249-431-11	CARBON MELF	15K	5%	1/5W
R585	1-249-436-11	CARBON MELF	39K	5%	1/5W
R590	1-247-903-00	CARBON	1M	5%	1/6W
R700	1-249-409-11	CARBON MELF	220	5%	1/5W
R701	1-249-409-11	CARBON MELF	220	5%	1/5W
R702	1-249-409-11	CARBON MELF	220	5%	1/5W
R703	1-249-409-11	CARBON MELF	220	5%	1/5W
R704	1-249-417-11	CARBON MELF	1K	5%	1/5W
R705	1-249-417-11	CARBON MELF	1K	5%	1/5W
R706	1-249-001-00	CARBON MELF	1	5%	1/5W
R707	1-249-001-00	CARBON MELF	1	5%	1/5W
R708	1-249-425-11	CARBON MELF	4.7K	5%	1/5W
R709	1-249-429-11	CARBON	10K	5%	1/6W
R710	1-249-425-11	CARBON MELF	4.7K	5%	1/5W
R711	1-249-429-11	CARBON	10K	5%	1/6W
R712	1-249-393-11	CARBON MELF	10	5%	1/5W
R713	1-249-393-11	CARBON MELF	10	5%	1/5W
R714	1-215-460-00	CARBON MELF	43K	5%	1/5W
R715	1-249-437-11	CARBON MELF	47K	5%	1/5W
R716	1-249-433-11	CARBON MELF	22K	5%	1/5W
R717	1-249-437-11	CARBON MELF	47K	5%	1/5W
R718	1-249-437-11	CARBON MELF	47K	5%	1/5W
R719	1-215-460-00	CARBON MELF	43K	5%	1/5W
R720	1-249-437-11	CARBON MELF	47K	5%	1/5W
R721	1-249-433-11	CARBON MELF	22K	5%	1/5W
R722	1-249-437-11	CARBON MELF	47K	5%	1/5W
R723	1-249-437-11	CARBON MELF	47K	5%	1/5W
R724	1-249-366-11	CARBON MELF	0	5%	1/5W
R725	1-249-366-11	CARBON MELF	0	5%	1/5W
R726	1-249-366-11	CARBON MELF	0	5%	1/5W
R727	1-249-366-11	CARBON MELF	0	5%	1/5W
R728	1-249-366-11	CARBON MELF	0	5%	1/5W
R729	1-249-429-11	CARBON MELF	10K	5%	1/5W
R801	1-216-196-00	METAL CHIP	820	5%	1/8W
R802	1-216-189-00	METAL CHIP	430	5%	1/8W
R803	1-216-184-00	METAL CHIP	270	5%	1/8W
R804	1-216-184-00	METAL CHIP	270	5%	1/8W
R805	1-216-184-00	METAL CHIP	270	5%	1/8W
R901	1-216-228-00	(FOR FOCUS BOARD) ……METAL CHIP 18K 5% 1/8W			
R901	1-249-411-11	(FOR LED (D) BOARD)..CARBON 330 5% 1/6W			
R902	1-216-214-00	(FOR FOCUS BOARD) ……METAL CHIP 4.7K 5% 1/8W			
R902	1-249-411-11	(FOR LED (E) BOARD)..CARBON 330 5% 1/6W			

ELECTRICAL PARTS

Ref.No.	Part No.	Description
RV1	1-237-591-11	RES, ADJ, METAL GRAZE 2.2K
RV2	1-237-592-11	RES, ADJ, METAL GRAZE 22K
RV3	1-237-593-11	RES, ADJ, METAL GRAZE 220K
RV101	1-237-586-11	RES,VAR, CARBON 20KX2/50K/100KX2 (VOL/BAL/FADER)
RV102	1-237-587-11	RES, VAR, SLIDE 100K/100K (BAS/TRE)
RV501	1-230-631-11	RES, ADJ, CARBON 22K
RV502	1-230-631-11	RES, ADJ, CARBON 22K
RV503	1-230-631-11	RES, ADJ, CARBON 22K
RV504	1-230-631-11	RES, ADJ, CARBON 22K
RV505	1-226-702-00	RES, ADJ, METAL GLAZE 2.2K
RY501	1-515-519-00	RELAY (FOR MUTING)
RY700	1-515-649-11	RELAY (FOR POWER AMP POWER SUPPLY)
S501	1-553-510-00	(E)...SWITCH, SLIDE (CH. SPACE)
S801	1-554-813-31	SWITCH, KEY BOARD (2)
S802	1-554-813-31	SWITCH, KEY BOARD (3)
S803	1-554-813-31	SWITCH, KEY BOARD (4)
S804	1-554-813-31	SWITCH, KEY BOARD (5)
S805	1-554-813-31	SWITCH, KEY BOARD (MONO)
S806	1-554-813-31	SWITCH, KEY BOARD (LOCAL)
S807	1-554-813-31	SWITCH, KEY BOARD (BAND)
S808	1-554-813-31	SWITCH, KEY BOARD (1)
S809	1-554-813-31	SWITCH, KEY BOARD (SEEK/-, ⏮)
S810	1-554-813-31	SWITCH, KEY BOARD (SEEK/+, ⏭)
S811	1-554-813-31	SWITCH, KEY BOARD (6)
S812	1-554-813-31	SWITCH, KEY BOARD (MANU/-)
S813	1-554-813-31	SWITCH, KEY BOARD (MANU/+)
S814	1-554-813-31	SWITCH, KEY BOARD (⏏)
S815	1-570-992-11	SWITCH, KEY BOARD (PLAY/STOP)
S816	1-554-813-31	SWITCH, KEY BOARD (TUNER)
S817	1-554-813-31	SWITCH, KEY BOARD (DISPLAY)
S818	1-554-813-31	SWITCH, KEY BOARD (MEM/L+)
S819	1-554-813-31	SWITCH, KEY BOARD (RESET)
S901	1-570-953-11	SWITCH, PUSH (1 KEY)
S902	1-554-938-11	SWITCH, LEAF (LIMIT)
T1	1-404-458-00	COIL, DISCRI (PRIMARY)
T2	1-404-468-00	TRANSFORMER, DISCRIMINATOR
T501	1-447-967-11	TRANSFORMER, DC-DC CONVERTER
TH501	1-807-776-11	THERMISTOR ERT-D2FHJ802T
TH502	1-807-776-11	THERMISTOR ERT-D2FHJ802T
TH503	1-807-776-11	THERMISTOR ERT-D2FHJ802T
X1	1-567-250-11	OSCILLATOR, CERAMIC(18.95MHz)
X2	1-567-713-11	VIBRATOR, CRYSTAL(4.5MHz)
X501	1-567-820-11	VIBRATOR, CRYSTAL (16.9344MHz)
X502	1-567-821-11	VIBRATOR, CRYSTAL (4.19430MHz)
VDR701	1-807-601-11	VARISTOR, CERAMIC

ACCESSORY & PACKING MATERIAL

Part No.	Description
1-532-360-XX	FUSE, 1A (F702,703)
1-532-422-00	FUSE, 6.3A (F701)
1-557-820-11	CORD, CONNECTION
1-559-123-11	CORD (WITH CONNECTOR)
3-310-655-01	SUPPORT (ND), FITTING
3-323-208-01	BUSHING, RUBBER
3-323-209-01	BOLT (4-5), STUD
3-323-210-01	ADJUSTOR, STUD BOLT
3-323-217-01	HOLDER, BUSHING
3-323-219-01	FRAME, FITTING
3-323-268-01	TAPE (C), MAGIC
3-323-269-01	TAPE (D), MAGIC
3-335-423-01	SHEET, PROTECTION (FOR COVER)
3-339-403-01	SPRING
3-339-416-01	COLLAR
3-339-417-01	COVER
3-339-461-01	(R66).....INDIVIDUAL CARTON
3-339-441-01	(R88:US).....INDIVIDUAL CARTON
3-339-442-01	(Canadian,AEP,E)...INDIVIDUAL CARTON
3-339-445-01	CUSHION
3-336-617-01	BAG, PROTECTION (FOR SET)
3-339-456-01	BAG (UNIT), PROTECTION (FOR HIDE-AWAY UNIT)
3-339-457-01	SPACER
*3-339-460-01	SHAFT, ACCESSORY
3-701-613-00	BAG, POLYETHYLENE (FOR FUSE)
3-701-628-00	BAG, POLYETHYLENE, STANDARD (FOR FITTING MATERIAL)
3-701-623-00	BAG, POLYETHYLENE (FOR CABLE)
	BAG, POLYETHYLENE, STANDARD (FOR PRINTED MATTER)
3-764-704-11	(AEP,E).....FITTING DRAWING
3-764-704-21	(US, Canadian)....FITTING DRAWING
3-764-704-31	(Canadian).....FITTING DRAWING
3-764-704-41	(AEP).....FITTING DRAWING
3-764-745-21	(R66).....FITTING DRAWING
3-765-937-11	(AEP,E).....MANUAL, INSTRUCTION
3-765-937-21	(R88:US, Canadian)....MANUAL, INSTRUCTION
3-765-937-31	(Canadian).....MANUAL, INSTRUCTION
3-765-937-41	(AEP).....MANUAL, INSTRUCTION
3-769-128-21	(R66).....MANUAL, INSTRUCTION
X-3320-524-1	SCREW ASSY (A)

TROUBLE CHECKS

The following checks will assist in the correction of most problems which you may encounter with your unit.
Before going through the check list below, first refer back to the connection and operating procedures.

CD player section

Play does not begin.	• The disc inserted is in the stop mode. • Dusty or defective disc. • The ambient temperature is more than 60°C (140°F).
Disc cannot be loaded or the disc is automatically ejected.	• A disc is already loaded. • The disc is inserted with the label surface downwards.
The operation buttons do not work.	• The built-in microprocessor malfunctions. Press the reset button.
The sound is skipped due to vibration.	• The shipping screw is not removed. • The unit is installed at an angle of more than 40°. • The unit is not installed on the sturdy part of car. • Dusty or defective disc.

Tuner section

Preset tuning is not possible.	• Memorize the correct frequency. • The broadcast is weak. → Use manual tuning.
Automatic tuning is not possible.	• The broadcast is weak. → Use manual tuning.
The STEREO indicator flickers.	• Tune in precisely. • The broadcast is weak. → Press the MONO button.

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Audio Group

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